MASSACHUSETTS

EYE AND EAR INFIRMARY

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MASSACHUSETTS EYE & EAR INFIRMARY
243 CHARLES ST., BOSTON 14, MASS.

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MASSACHUSETTS EYE AND EAR INFIRMARY ANNUAL REPORT FOR 1966

MASSACHUSETTS
EYE AND EAR
INFIRMARY

One Hundred and Fortieth

ANNUAL
REPORT

Reports for 1966

Staff and Officers for 1967

as of February 8, 1967

243 CHARLES STREET
BOSTON, MASSACHUSETTS 02114

Board of Managers

Henry Hixon Meyer, *Chairman*
William H. Claflin, III, *President*
Horace W. Frost, *Treasurer*
Hon. Edmund V. Keville, *Secretary*

Fred A. Baumeister*
Melville Chapin
Mrs. Richard Cary Curtis
Robert H. Hopkins
George M. Lovejoy, Jr.
William A. Parker
Henry K. Porter
John Ryan*
Walter H. Trumbull
Frederic Winthrop

**appointed by the Commonwealth*

Director

Charles T. Wood

Chiefs of Service

David G. Cogan, M.D.
Ophthalmology

Harold F. Schuknecht, M.D.
Otolaryngology

TRUSTEES

Walter H. Trumbull	1929*
Robert F. Bradford	1934
William A. Parker	1935
Henry Hixon Meyer	1937
Mrs. Richard Cary Curtis	1940
Horace W. Frost	1940
Hon. Edmund V. Keville	1942
Frederic Winthrop	1943
Mrs. Sullivan A. Sargent	1945
William H. Claflin, III	1947
Mrs. John W. Farley	1948
William F. Keesler, Jr.	1948
Arthur T. Lyman	1948
The Rev. Robert G. Metters	1948
August R. Meyer	1948
Miss Amelia Peabody	1948
Hon. Leverett Saltonstall	1948
Frederick H. Verhoeff, M.D.	1948
Nathaniel Faxon, M.D.	1949
Francis W. Hatch, Jr.	1951
Robert H. Hopkins	1951
George L. Pew	1951
Howland S. Warren	1951
Melville Chapin	1951
George A. McLaughlin	1952
Henry K. Porter	1952
Mrs. Francis T. Hunter	1953
Mrs. Varaztad H. Kazanjian	1953
Richard P. Chapman	1955
William Ehrlich	1955
Richard Harte	1955
Weston Howland, Jr.	1955
William L. Saltonstall	1957
Leslie Soule	1957
Mrs. Walter C. Dodge	1963
Thomas B. Frost	1963
John S. Howe	1963
Frederick H. Lovejoy	1963
Thomas Allsopp	1963
Frank S. Christian	1965
George M. Lovejoy, Jr.	1965
Mrs. John Lowell	1965
Frederick C. Rozelle, Jr.	1965
George C. Seybolt	1965
Francis S. Hill	1966
Robert Bacon	1966
James I. Summers	1966
Leo F. Daley	1966

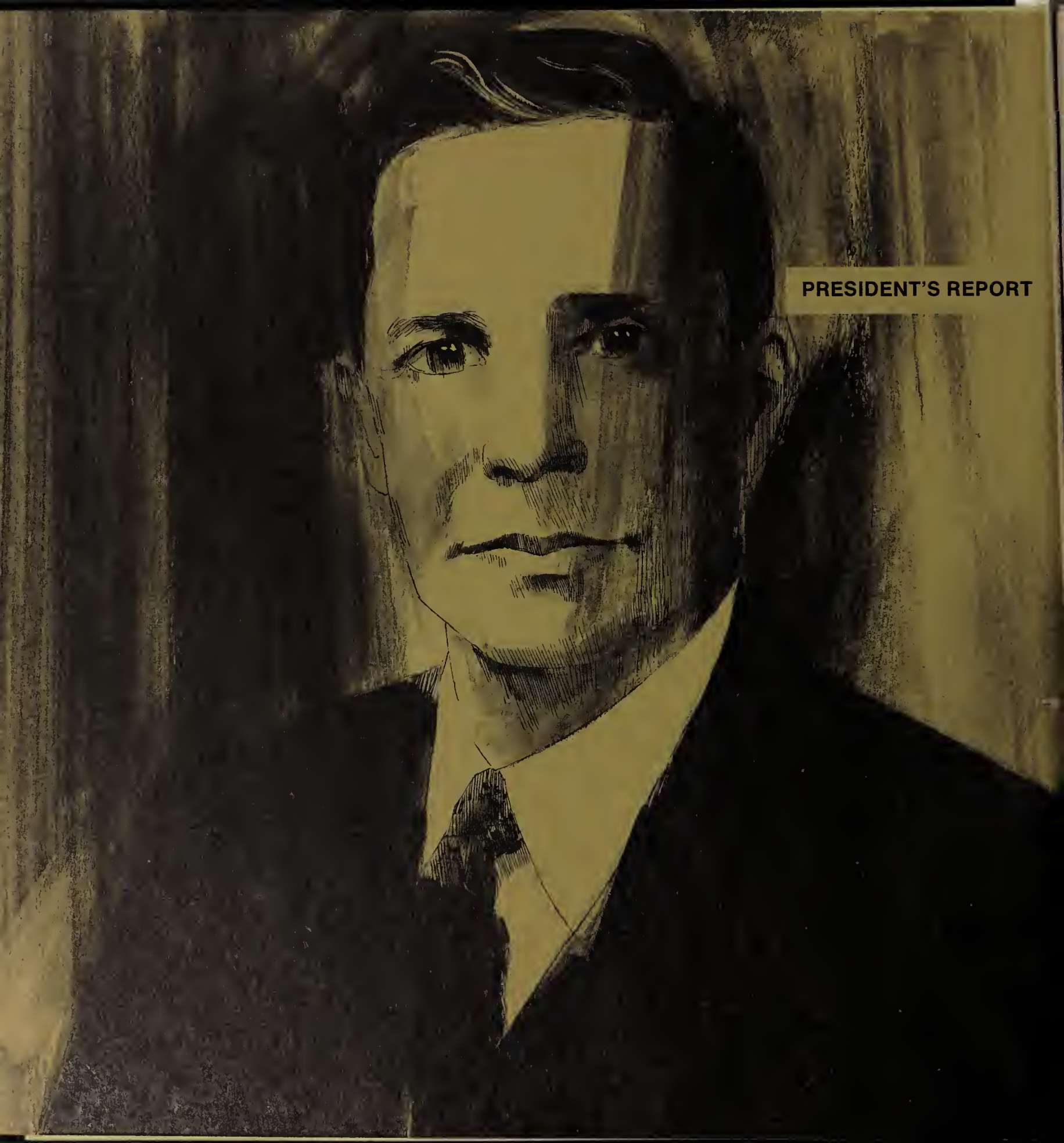
**dates indicate year of appointment*

The embossed eye and ear on the cover are reproductions of old engravings from the Bettmann Archives

The Massachusetts Eye and Ear Infirmary is the second oldest hospital in the United States specializing in the treatment of diseases and other conditions of the eye and of the ear, nose and throat. It was established in 1824 as a free clinic for the treatment of the eye by Dr. Edward Reynolds and Dr. John Jeffries. The Infirmary was incorporated in 1827, and after years of steady expansion, the present building on Charles Street was constructed in 1899.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. Neither the Trustees nor the Board of Managers are paid, and the Medical Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital "on service". The hospital receives no support from city or state but is financed by receipts from patients or public agencies responsible for them, by voluntary gifts and bequests, and by our allotment from the United Community Services as a participating agency. However, the Infirmary's quota from the United Community Services is far below the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.



PRESIDENT'S REPORT

It is a great pleasure to bring this report to you for the year ended September 30, 1966. This year, Mr. Charles T. Wood succeeded Mr. Francis S. Hill as Director of the hospital. The transition was greatly facilitated by the fact that Mr. Hill continued his association with the hospital as a Trustee and because of Mr. Wood's many years' service as Assistant and Associate Director. The Board and I wish to take this opportunity to express our deep gratitude to Mr. Hill for his many years of devoted service as Director of the Infirmary. Also during the year the new position of Chairman of the Board was filled by Mr. Henry Hixon Meyer, and I was elected to succeed him as President.

The problem which was uppermost in our minds during the year was the progressive overcrowding in all areas of the hospital. This had its effect on all of our operations and many of our people. The Medical Staff was ever vocal and constant in its efforts to provide the leadership and support to continue forward towards the expansion of our facilities. This pressing need led the Board to the conclusion that we must look elsewhere for additional space other than the adjacent Suffolk County Jail property. We, therefore, called on our neighbors, the Massachusetts General Hospital.

We are, indeed, deeply indebted to the Trustees and the Administration of the Massachusetts General Hospital for their complete understanding and willingness to sacrifice their interest on our behalf. They spent many hours with us developing seven possible sites on M.G.H. property for our consideration. After much study we came to the conclusion that the most feasible place for an expansion for the Infirmary was on its own small land space behind the present main building. For their many efforts on our behalf, we wish to send our most heartfelt thanks to our friends at the Massachusetts General Hospital.

This close cooperation and joint planning between the two hospitals bore fruit in several additional areas. Both boards authorized a project study for a new joint MGH — MEEI facility on the site of the MGH's Thayer Building to house the Tumor Clinic and a new Radiation Therapy Unit. The study is nearly complete, and the two boards will shortly make a final decision on whether or not to proceed.

There was also created a joint Medical Policy Committee consisting of our Chiefs of Service, the MGH's Chiefs of Surgery, Medicine and Pediatrics, and the Directors of both hospitals. This Committee met frequently during the year and has been invaluable in maintaining lines of communication. It is an excellent vehicle for solving mutual problems that crop up from time to time.

While the two institutions are closely affiliated on a professional basis, their corporate entities are completely separate. Thus, the Infirmary has the primary responsibility of providing for its own future. Accordingly, we have recently secured several architectural feasibility studies involving expansion on our own land. We were most favorably impressed by the architectural approach of a Memphis, Tennessee firm which has had broad experience in building hospitals in the past. We, therefore, proceeded to contract with Walk Jones/Mah & Jones/Architects/Inc. to survey our needs and to draw up plans for a new building to be located behind the present Infirmary and running parallel to Charles Street.

The Infirmary is about to face decisions with respect to its future which have far-reaching consequences. It seems clear that our expansion will have to be accomplished in stages so that services in our specialties to patients, not only from the New England area, but indeed from many parts of the world, can be continued without interruption.

To support this expansion will require a major fund raising effort. It will require that government assistance be sought to the fullest extent possible, as well as help from foundations, industry and other philanthropic organizations. However, in the last analysis, we will have to rely on our friends and the public whom we have served in the past to provide the means of expanding our facilities to meet the demands of the future. To succeed in this effort, it will fall on the Trustees and the Medical Staff to provide the leadership and much of the leg-work involved.

I recognize that the recent past has been a period of many frustrations for those carrying large burdens. The period ahead will continue to be most difficult and promises to be one requiring the ultimate in teamwork and consideration by everyone in the Infirmary family. This has always been forthcoming in the past, and I am sure can be counted on to provide an even more illustrious future.

William H. Claflin, III
President

BALANCE SHEET

ASSETS

Cash in Bank and on Hand		$ 1,370,059.53
Investments in Securities — Book Value		7,587,573.20
Accounts Receivable:		
Patients — less reserve for doubtful accounts	$ 528,882.41	
Miscellaneous	956.11	529,838.52
Inventories of Supplies, etc.		52,764.62
Unamortized Pension Costs (see note)		140,217.27
Plant:		
Land and buildings	$3,711,452.66	
Furniture, fixtures and equipment	626,516.15	
	$4,337,968.81	
Less: Reserve for depreciation	1,571,529.93	2,766,438.88
TOTAL		$12,446,892.02

CONDENSED INCOME ACCOUNT

for the year ended September 30, 1966

Gross Charges for Services to Patients		$4,172,581.47
Adjustments to Gross Charges:		
Allowances to patients	$228,973.14	
Allowances to contracting agencies	56,545.35	
Allowances to Blue Cross	44,316.16	
Provision for uncollectible accounts	60,371.12	390,205.77
Net Revenue from Services to Patients		$3,782,375.70
Other Operating Revenue		232,888.78
Total Operating Revenue		$4,015,264.48
Hospital Operating Expenses (including provision for depreciation — $144,305.39)		4,297,066.93
Hospital Operating Loss		$ 281,802.45
Donated Income:		
United Community Services	$ 30,761.00	
Estates of Elisha V. Ashton, G. Gorham Peters and others	17,130.51	47,891.51
Hospital Net Loss		$ 233,910.94
Unrestricted Investment Income from Permanent Funds, less Applicable Expenses		318,382.67
Investment Income in Excess of Hospital Net Loss — Transferred to General Fund		$ 84,471.73

Note: During the year, hospital operating expenses aggregating $77,570.20 were charged directly against Permanent and Temporary Funds as follows:

Against Permanent Funds — Income	$ 26,573.61
Against Temporary Funds	50,996.59
	$ 77,570.20

REPORT OF THE TREASURER

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 30, 1966 and the related income account for the year ended at that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related condensed income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1966 and the results of its operations for the year ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Patterson, Teele & Dennis
Boston, Massachusetts
December 14, 1966

September 30, 1966

LIABILITIES AND FUNDS

Advances from Patients	$ 18,073.69
Accounts Payable and Accruals	268,046.00
Special Funds	36,342.63
General Fund	2,095,010.64
General Pension Reserve	845,910.29
Permanent Funds — Income Restricted	1,553,420.78
Permanent Funds — Income Unrestricted	2,734,619.73
Special Purpose Funds	461,321.03
Unexpended Restricted Income of Permanent Funds	269,522.92
Temporary Funds	646,319.48
Funds Invested in Plant	2,766,438.88
Plant Depreciation Fund	132,747.53
Undistributed Security Gains	619,118.42
TOTAL	$12,446,892.02

Note: Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments are chargeable to future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of $16,400 over the estimated average remaining service lives of participants from that date.

SUMMARY OF SECURITIES

(as of September 30, 1966)

	*Book Value**	*Market Value**	*% Mkt. Value*
BONDS			
U.S. Government	$2,990,126	$ 2,866,741	25.4
Canadian Government	29,400	25,650	.2
Railroad	165,225	129,305	1.1
Utility	777,371	671,994	5.9
Industrial	385,712	337,401	3.0
Financial	396,936	377,905	3.3
Miscellaneous	62,900	not valued	—
TOTAL BONDS	$4,807,670	$ 4,408,996	38.9
TOTAL PREFERRED STOCKS	149,520	140,870	1.2
COMMON STOCKS			
Railroad	$ 116,049	$ 289,093	2.5
Utility	478,230	1,283,393	11.3
Industrial	1,421,249	3,941,987	34.9
Financial	313,461	584,488	5.2
Insurance	159,912	442,536	3.9
Miscellaneous	25,000	55,400	.5
TOTAL COMMON STOCKS	$2,513,901	$ 6,596,897	58.3
TOTAL	$7,471,091	$11,146,763	98.4
WEBER FUND (BONDS)	$ 11,508	$ 11,337	—
WINTHROP FUND (BONDS & STOCKS)	$ 104,974	$ 176,654	1.6
TOTAL SECURITIES	$7,587,572	$11,334,754	100.0%

* — Cents Omitted

Horace W. Frost
Treasurer

Considering that this is the 142nd year of operation of the Massachusetts Eye and Ear Infirmary, I feel quite humble in writing this my first annual report as Director. As people, finances and bricks and mortar are the major topics, let me start with some of the major changes that have taken place during the year in the administration and departmental staffing.

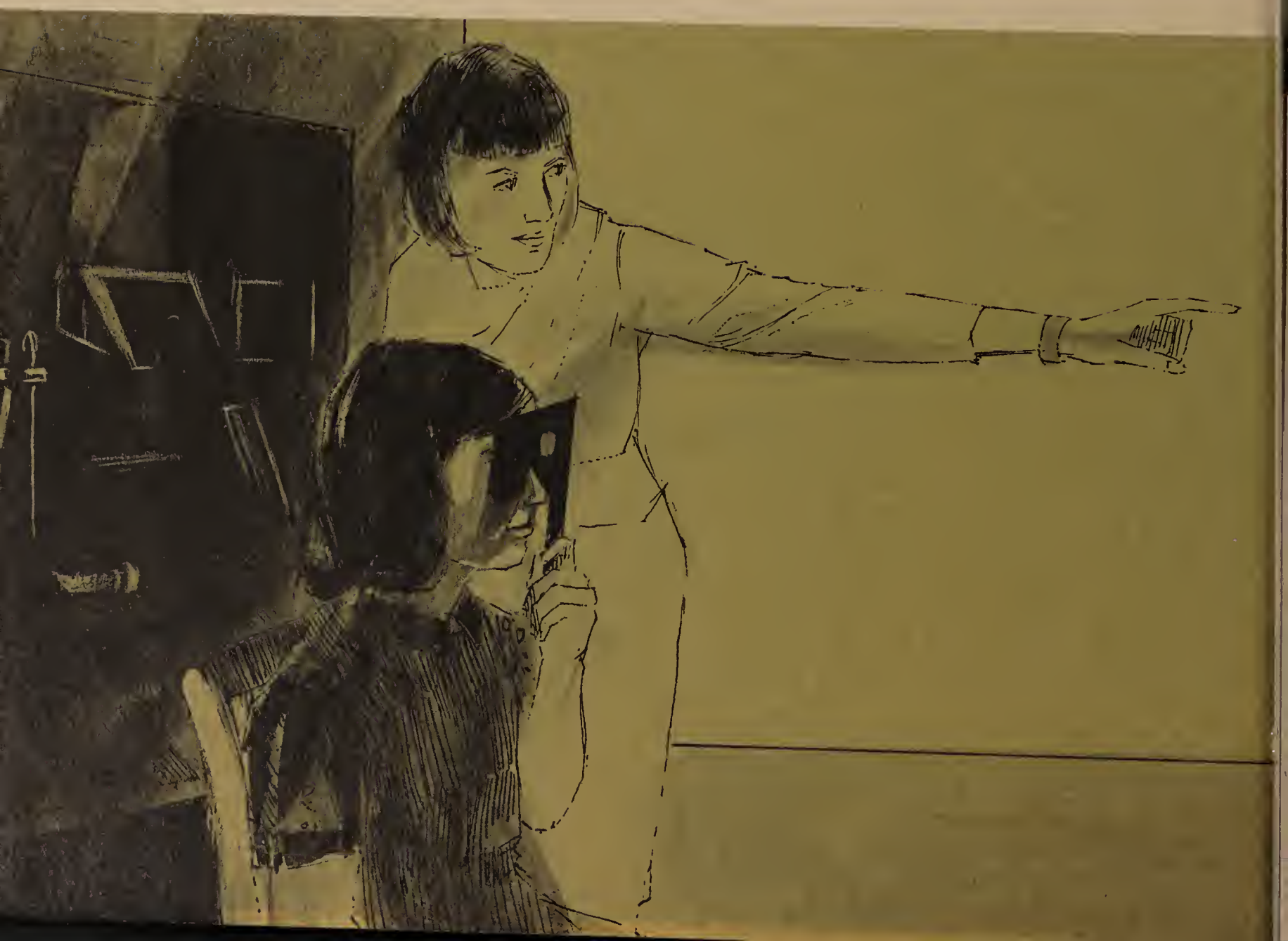
At the administrative level, our Comptroller, Mr. Raymond W. Lyons, was appointed by the Board to the position of Assistant Director and Comptroller and Mr. Bruce M. Jones was appointed as Assistant Director. Mr. Lyons' duties did not change appreciably, but his responsibilities were broadened to capitalize on his many years of experience with the Infirmary. The Infirmary is indeed most fortunate on both scores.

An addition to the departmental staff, in a new position, is Mrs. Elizabeth Houlihan. Mrs. Houlihan's employment as Director of Volunteers comes as a result of action taken by the Trustees to revitalize the Infirmary's volunteer program. We believe that there is much that can be done to relieve overburdened hospital personnel and at the same time provide an opportunity for volunteers to be of service. Our new Director of Volunteers has been given a good start in the right direction since prior to her arrival we clearly showed a considerable increase in volunteer activity over the previous year. This year we had 158 volunteers who donated a total of 11,515 hours of their time. This is an increase over the previous year of 21 volunteers and more than 1,000 hours. Also at the departmental level, we are fortunate to have acquired the services of Mr. John Downey as our new Assistant Executive Housekeeper.

In the Nursing Department, we regret the resignation of our Director of Nurses, Mrs. Margaret Verrill, R.N., on June 10, 1966 after ten years of service. Following a brief period as Acting Director, Miss Barbara Czechowski, R.N., was appointed Director of Nurses. There have been two other major changes in the nursing administration. One is the appointment of Miss Ruth Straitiff as Administrative Supervisor, a non-professional position created to replace the assistant director of nursing. As Administrative Supervisor, Miss Straitiff is responsible for all the administrative duties which are not related to clinical nursing and also coordinates the services rendered by the nursing staff with those of the other departments indirectly involved with patient care. Also in the Nursing Department, the duties of Clinical Instructor in the Operating Rooms were changed somewhat to establish better communication between the operating rooms and the nursing administration. Miss Lorraine Brown, R.N., was employed as Clinical Instructor and is presently developing a comprehensive educational program in the operating rooms.

Running briefly through some of the departments and their work, the Dietary Department served 287,755 meals this past year, as well as serving coffee, tea or lunch at approximately 180 small hospital functions or meetings. Incidentally,

REPORT OF THE DIRECTOR



our Dietary Department won a Blue Ribbon award at the New England Hospital Assembly meetings for its display entitled "Centralized Food Service, a Key to Savings at the MEEI".

In the area of services to patients, let me once again return to the Nursing Department to point out some startling but wonderful statistics. Despite the acute shortage of professional nurses throughout the country, our present full-time staff nurse count is the highest it has ever been in the past five years. Our total number of nurses on all levels increased from 96 in 1965 to 114 at present.

The year 1966 saw the advent of Medicare on July 1st. For the five months — July, August, September, October and November, 1,107 admissions of Medicare patients were handled at the Eye and Ear Infirmary. These amounted to 25 percent of the total admissions for the five month period. There were not too many disruptions in the Infirmary's business because of Medicare, thanks to the capable management of our Department of Patients Accounts. We managed the transition with the addition of two employees and are up to date on our hospital billing. We are, however, awaiting approval on accounts from Medicare, some of which date back to July 1st, and at one point our Medicare accounts outstanding amounted to almost $47,000. We cannot as yet tell how Medicare will affect our Out-Patient Department but some of the figures seem to be significant. The total number of out-patient visits showed a slight decrease last year, falling from 70,531 to 70,182. This is the net of a decline of 3,182 admissions to the Ear, Nose and Throat Clinic and an increase of 2,833 visits to the Eye Clinic.

The Medical Staff has been wonderfully cooperative in endeavoring to get as much utilization as possible out of our cramped quarters. We have long been aware of the peaks and valleys that occur in the Infirmary's bed scheduling, but we were surprised to discover that there are also occasional gaps in our operating room schedule. It is a little early at the present to give pertinent statistics, but I feel confident that a year from now we will show definite improvement in our bed utilization. Dr. Harry E. Braconier, as Chairman of the Utilization Committee, has been a great inspiration to me in the difficult work of seeing that public funds are not supporting improper utilization of Infirmary facilities.

The Massachusetts Eye and Ear Infirmary and the Massachusetts General Hospital now have a Joint Medical Policy Committee charged with the ongoing scrutiny of, and improvement in, the care of patients in both institutions. The Committee has had several meetings and has proved valuable in keeping the lines of communication open between the two hospitals.

There was another change affecting the Medical Staff this year. In addition to some minor By-law changes, a new medical staff category was initiated, known as the Associate Staff. Persons serving the Infirmary in this capacity will have limited staff privileges and responsibilities. They will not, for example, be allowed to admit patients directly to the hospital, nor will they be required to at-

tend meetings compulsory for members of the Active Staff.

The largest item affecting the budget this year, and of course for next year also, was the very significant increase in employees' salaries. Our total annual payroll increased from $192,843. monthly to $218,155. monthly, or a total annual budget of approximately $2,988,380. for personnel alone. The largest significant increase was in the Nursing Department which employs the greatest number of people, but throughout the hospital there was a general upgrading of employees' salaries. The Eye and Ear Infirmary, as well as all other local hospitals, is offering salaries and wages comparable to what one might find in industry or other fields of endeavor.

Before mentioning expansion plans, let me touch briefly on a few projects completed this year in an effort to keep our present plant in good functional and efficient order. We completed the addition of new X-Ray equipment, the remodeling of the administrative offices, and the air-conditioning of the entire first floor. We remodeled the Ear, Nose and Throat Clinic and completed the conversion of the clinical surgical rooms into areas that could be used for giving light anesthesia. The latter enabled us to handle ambulatory surgical patients in a more efficient manner and freed our emergency rooms to be available for the care and treatment of emergencies on a 24 hour basis. There were some minor remodeling jobs including the Audiology office, the creation of the mail room, and several maintenance and minor construction activities for various laboratories. All in all, there has been a general decline in major construction work while we await the day for major expansion of the facilities.

During this year, we have been working very closely with Massachusetts General Hospital developing facts and figures preliminary to making a joint attack on our space problems. We agreed with Massachusetts General Hospital to plan joint radiotherapy facilities for the benefit of the patients of both hospitals. The site for that project has been selected and an architect has been commissioned by both hospitals to make preliminary drawings for this new facility. In the meantime, the administrative organization is progressing in the planning of the joint Radiotherapy Unit, and the Resources and Development Departments of both hospitals are studying ways and means to secure the necessary financing. The Eye and Ear Infirmary is greatly handicapped by the fact that we own very little land beyond that on which our present building is located. The Infirmary, I am sure, was founded on hopes and dreams, and it has weathered many storms throughout its history. Presently, these dreams and hopes are taking on bold new dimensions, and I am confident that momentarily our plans will materialize. We can then continue the road upward along the lines of our international reputation for excellence in our specialties.

Charles T. Wood
Director

COMPARATIVE STATISTICS

HOSPITAL

	1965	1966
Service Patients — Eye Cases	1,611	1,621
Ear, Nose and Throat Cases	1,397	1,421
Total Service Patients Admitted	3,008	3,042
Private Patients — Eye Cases	3,929	4,062
Ear, Nose and Throat Cases	3,384	3,230
Total Private Patients	7,313	7,292
Total Patients Admitted	10,321	10,334
Operations, Service — Eye Cases	1,642	1,588
Ear, Nose and Throat Cases	1,236	1,249
Operations, Private — Eye Cases	4,142	4,395
Ear, Nose and Throat Cases	3,269	3,154
Total Operations	10,289	10,386

CLINICS

New Patients — Eye Clinic	4,184	4,676
Ear, Nose and Throat Clinic	2,971	2,863
Total New Patients	7,155	7,539
Revisits — Eye Clinic	44,908	47,249
Ear, Nose and Throat Clinic	18,468	15,394
Total Clinical Revisits	63,376	62,643
Visits — Eye Clinic	49,092	51,925
Ear, Nose and Throat Clinic	21,439	18,257
Total Clinical Visits	70,531	70,182
Emergency Patients Admitted to Hospital	318	285
Patients Admitted to Emergency Ward	13,581	14,770

	1965	1966
Patient Days Care — Service	18,372	17,184
Private	37,401	38,031
Total Patient Days Care	55,773	55,215
Average Number of Patients Treated Daily —		
Service	50	47
Private	102	104
Total Average Treated Daily	152	151
Average Number of Days Patients Remain —		
Service	5.9	5.6
Private	5.2	5.2
Beds Available and Per Cent of Occupancy —		
Service	66 76%	66 71%
Private	112 91%	112 93%
Total Beds Available	178	178
Per Capita Cost Per Day — Service, Routine Care	$28.69	$30.22
Special Services	16.31	20.36
Total Cost Per Day Per Service Patient	$45.00(A)	$50.58
Per Capita Cost Per Day —		
Semi-Private, Routine Care	$31.87	$33.58
Special Services	18.12	22.63
Total Cost Per Day Per Semi-Private Patient	$49.99(A)	$56.21
Per Capita Cost Per Day —		
Private, Routine Care	$36.65	$38.62
Special Services	20.85	26.02
Total Cost Per Day Per Private Patient	$57.50(A)	$64.64
Condition of Patients on Discharge — Died	12	15
Autopsies	25%	40%
Discharged	10,316	10,345

(A) Overhead Ratio 27%

DEPARTMENT OF OPHTHALMOLOGY

Like the proverbial big tree which cast so much shade that little else grew around and beneath it, the talk and thought of a new Infirmary eclipsed almost everything else this past year. We have exciting plans for expansion of patient care and for research but patience, we are told, is the greatest of virtues and we must agree that it has merits.

Organization and Patient Care

Despite an increasingly heavy load of diagnostic procedures and special services the cramped quarters of the Out-Patient Department continue to serve the approximately 50,000 patient-visits to the Eye Clinic each year. This number of visits is about the same as has prevailed for the past four years and is about ten percent more than the average of ten years ago. The Emergency Room visits at almost 15,000 (for combined eye, ear, nose and throat patients) is increasing annually and is more than double that of ten years ago. The number of eye operations for 1966 was about 6,000, showing in recent years an annual increase of approximately 300 and being about 35 percent greater than ten years ago. It is still too early to state what effect Medicare will have on patient-visits but it has increased the red tape considerably. Medicaid will certainly add further to the administrative complexities.

A new type of staff appointment called Associate (in contrast to the Active Staff) is under consideration. It is proposed that Associate physicians will serve in the Out-Patient Clinic and participate in conferences but will not be entitled to admit private patients into the hospital. By this new appointment we hope to offer some of the advantages of staff membership to qualified physicians to whom we would offer full membership if we had adequate bed space.

The staff residents now serve in pairs, two men to each rotation service, and attempts are being made to have the residents assist senior staff physicians in unusual types of surgery. Unlike most institutions we have never had a senior resident who holds an annual appointment for over-all supervision of the House Staff. Instead we rely on close supervision by the visiting staff and by post-residency Fellows assigned to the specialty clinics.

Specialty Clinics, Clinical Research, and the Center Grant

The Infirmary has long had contact with basic ophthalmic research in the Howe Laboratory but until the past year no substantial means has been available to support clinical research in a like manner. The Center Grant for the promotion of clinical research was conceived several years ago but the preparation of an application to the National Institutes of Health, the negotiations and necessary modifications to meet government regulations, the tentative planning for uncertain space, and the recruitment of personnel consumed two full years. Thus, it was not until the end of 1965 that the award, consisting of a seven year commitment, was made. The past year has been the first operational year of the grant.

With Dr. Reinecke at the administrative helm and the various specialty clinics (or services) as the functional units, we feel we have had a successful initial year, applying the results of laboratory investigations to clinical problems and launching potential investigators in this vital field.

Cornea Clinic: Dr. Dohlman and his collaborators have pioneered means for treating otherwise hopeless cases of bullous keratopathy and vascularized corneas by artificial implants. The novel method of suturing transparent silicone membranes to the posterior surface of the cornea was sufficiently promising in pilot attempts in Boston so that a team from the Cornea Clinic was dispatched to India for a larger field study. The uses of flush-fitting scleral contact lenses is being evaluated by Dr. John Carroll for the relief of corneal conditions that are not amenable to other forms of treatment. And Drs. Elliott, Boruchoff, and Leibowitz have, this past year, explored pharmacologic means of suppressing the dread rejection reaction of corneal transplants.

Glaucoma Consultation Service: Dr. Grant and multiple collaborators have

investigated various regulatory mechanisms for control of the normal and glaucomatous intraocular pressure. Drs. Houle and Meyer studied the effects of alcohol and of pituitary hormones; Dr. Thoft and Dr. Michon, the effect of echothiophate. Dr. Grant has continued a major interest in the surgical means of treating congenital and juvenile glaucoma while Dr. Walton has evaluated the heredity of special types of glaucoma in children.

Retina Service: Under the supervision of Dr. Schepens, this, the largest of our specialty clinics, conducts an active research program along with its considerable service activity. The number of patient-visits to this Clinic was in excess of 2,000 this past year and the number of cases coming to surgery was 219. Research emphases have included the development of cryogenic probes for coagulation (Dr. Amoils) and the design of surgical techniques for treatment of giant retinal breaks (Dr. H. Freeman).

Neuro-ophthalmology Service: This continues to be the poor boy in the family of specialty clinics with no official quarters and a consequently hit-or-miss consultation system. Despite lack of space and organization, the Service provides a valuable function for training of residents and for providing diagnostic services to appropriate patients. Research connected with neuro-ophthalmology has included Dr. Fricker's studies of electroretinography and cortically evoked potentials, Dr. Haining's observations on fluorescein angiography, and clinical studies by Dr. Cogan on several neuro-ophthalmic abnormalities.

Ocular Motility Clinic: With more than 5,000 patient-visits annually this Clinic offers challenging opportunities to probe problems concerned with movement and fusional abnormalities. A device, developed by Drs. Reinecke and Stephens, using a suction cup as a "handle" on the eye has proved helpful for measuring passive movability of the eye.

Refraction Clinic: This, the oldest of our specialty clinics, carries a large service load but many of the refractions are now being done in the recently constructed Clinic 2 as part of the general eye examination. Altogether more than 10,000 refractions were done this past year, chiefly by residents, optometrists and ophthalmic technicians. We are currently exploring the practicability of an Ophthalmic Assistants' training program and have enrolled several candidates on a trial basis. Although it does not seem feasible to increase the number of ophthalmologists sufficiently to meet the public need, it may be possible to increase the efficiency of ophthalmic services by having well-trained assistants who would provide technical services under the supervision of ophthalmologists. By having these assistants work closely with the resident staff we hope to establish a reciprocal relationship by which the assistants learn what is needed and the ophthalmologists learn how to utilize the services of the assistants most effectively.

Other Clinics: The planned Uveitis Clinic has had to be postponed as a result of Dr. Elliott's departure but a virology laboratory under the supervision of Dr. Anthony Nesburn is in full operation and making important clinical and experimental studies on the infectivity of the herpes virus. Dr. Donaldson has made further valuable contributions to the photographic recording of ophthalmic disease and has developed a split-ocular lens for measurement of the depth of the anterior chamber. The pediatric ophthalmology branch which operates at the Children's Hospital as part of the Infirmary's integral eye care has proved the feasibility of satellite services. We will eventually rotate residents through this service and possibly establish a similar service at the Peter Bent Brigham Hospital this coming year.

Major core facilities which have been developed under the auspices of the Center Grant have included an indexing system, a research photographic laboratory, animal quarters, and an IBM card and sorter system.

Laboratory Research

Most of the Infirmary's experimental research in ophthalmology is done in, or in conjunction with, the Howe Laboratory and Harvard's Department of Ophthalmology. Since these research inves-

tigations are described in a separate Annual Report none of the details will be presented here. Suffice it to note that the wide ranging agenda of activity this past year included the fields of glaucoma, experimental pathology, ophthalmic biochemistry, neuro-ophthalmology, ophthalmic toxicology, virology and immunology as well as participation in a new adventure leading to the establishment of a national Vision Information Center in Boston.

Teaching

Harvard's undergraduate course in ophthalmology, organized by Dr. Alfred Scott and incorporating a large number of the Infirmary staff as teachers, receives repeated accolades from the students and has been a traceable source of some of our applications for residency. A successful experiment of the past year was Dr. Kuwabara's didactic session for the faculty (a "teach-in for teachers") on electron microscopy of the eye.

The Harvard postgraduate course on the basic sciences in ophthalmology completed its four-month program at the Infirmary under the supervision of Dr. Allen with a full complement of students. This course dating back to 1938 was the parent and model for a much larger course begun by Dr. Lancaster and operated in recent years at Colby College during the summer months. Dr. Allen has now taken over the executive directorship of this latter course in addition to Harvard's postgraduate course while the Infirmary has become its official sponsor.

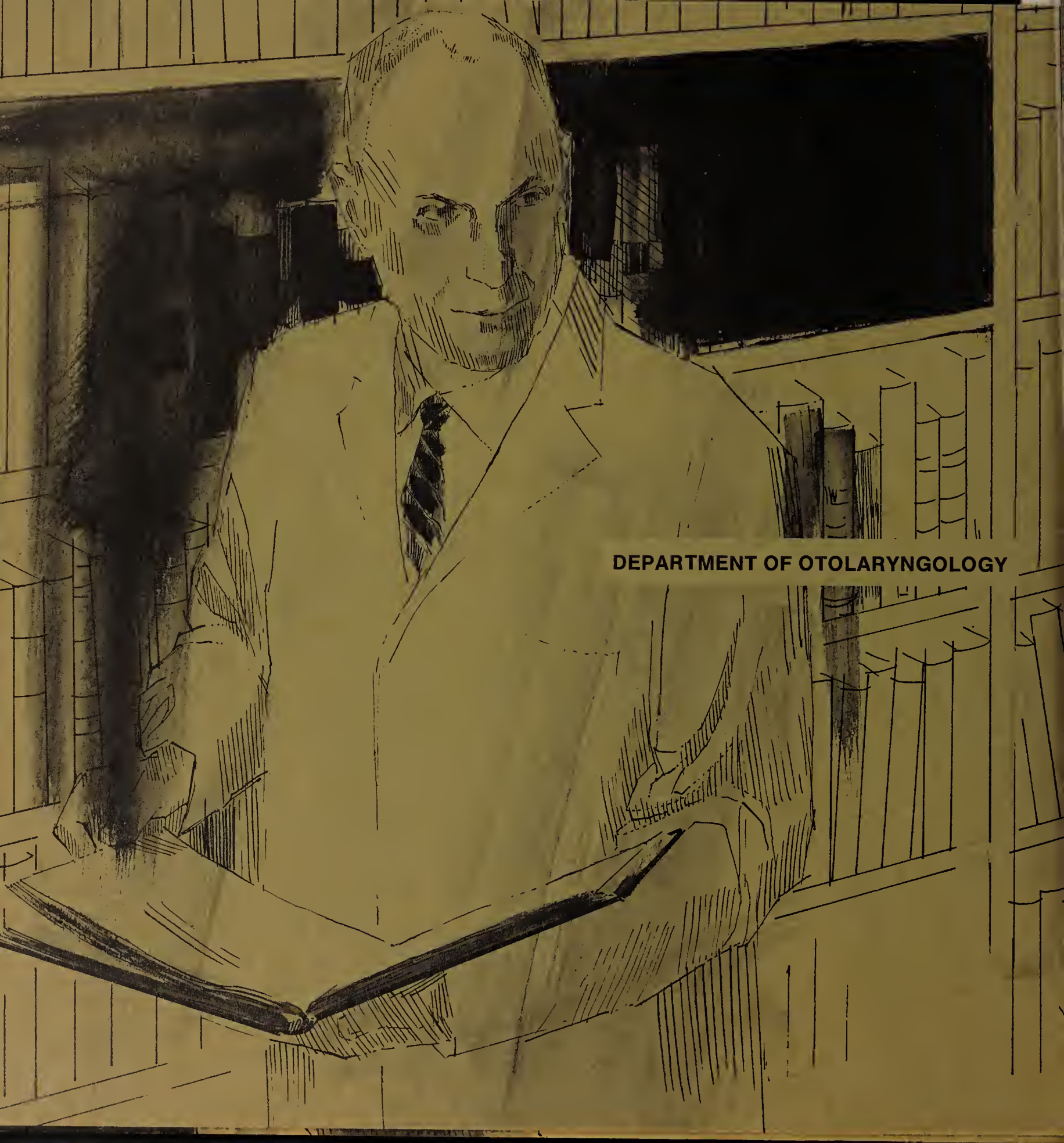
Commendations

Citation of current services to the Infirmary beyond the call of duty is a pleasant but dangerous indulgence and customarily avoided in Annual Reports. Usually we hide behind the pious cliché that everyone on the staff does more than is expected of him and that extra virtue finds its own reward. This year I would like, at the risk of inadvertent omissions, to note a few specific efforts that have been made by members of the staff and that reflect credit to the Infirmary.

One is the production of a moving picture film on glaucoma and the role of the Infirmary in its treatment. This was produced by Dr. Richard Simmons who despite a demanding practice spent many a long weekend preparing a film that should be of inestimable value in bringing the Infirmary to the people in the next several years of our proposed expansion. An analogous film on research activities at the Infirmary was prepared under the auspices of the Massachusetts Lions Clubs by Mr. Charles Snyder in the previous year. Another significant effort in the Infirmary's behalf has been Dr. Harry Braconier's energetic organization of the Utilization Committee which required careful planning as the government and other third parties take over much of the cost of hospitalization. Further encomiums are due Dr. Mahlon Easton for his continued supervision of the "roster physician" coverage for over-income patients who come to the Infirmary, Dr. Morton Grant for his direction of the Residents' Training Grant, and Dr. Thomas Hutchinson for his operation of group meetings for glaucoma patients. For the over-all professional planning of our new building and the remodeling of our old, an especial citation is due Dr. Robert Reinecke who serves multiple roles of coordination in our complex organization. And a final commendation to Dr. Carl C. Johnson who, with the Administrative Staff, handles our day-to-day activities with pleasant efficiency.

In the world of letters we are particularly pleased to note that Dr. Henry Allen has assumed the Chief Editorship of the *Archives of Ophthalmology* and that no less than five books have appeared this year from the pens of the ophthalmic staff. They are: "Lectures on Glaucoma" by Drs. Paul A. Chandler and Morton Grant; "The Pediatrician's Ophthalmology" edited by Dr. Sumner D. Liebman; "Strabismus" by Drs. Robert D. Reinecke and David Miller; the first volume of "Atlas of External Disease of the Eye" by Dr. David D. Donaldson; and my own "Neurology of the Visual System."

David G. Cogan, M. D.
Chief of Ophthalmology



DEPARTMENT OF OTOLARYNGOLOGY

The Department of Otolaryngology has shown steady progress in developing effective clinical, research and teaching programs. The integration of these programs into an effective group activity is an achievement of which the staff may be justly proud. Although we have been somewhat apprehensive about the possible effects of Medicare on the census of both out-patient and in-patient services, there has been little change to date. Then too, because of the Vietnam War, it seemed likely that government support of research might be curtailed. However this has not occurred. We have been able to meet our clinical, teaching and research responsibilities with few exceptions. Here is a brief report of what we have done:

The Clinics and the Hospital

During the past year there were 18,257 patient visits to the Out-Patient Clinic. There were 1,421 service patients and 3,230 private patients admitted to the hospital. Surgical procedures were performed on 1,249 service patients and 3,154 private patients. All of these patients were available for teaching at both the undergraduate and graduate levels. In addition 5,201 patients were examined and treated in the Emergency Department. Upgrading of the out-patient examining and treatment rooms, the Harvard Teaching Room and a new minor operating room for out-patients is costing $14,500. Last year 106 mastoidotympanoplasties and 175 stapedectomies were performed by the Residency Staff, all under careful supervision. Dr. Aram Roopenian reports a 25% decrease in plastic surgery service cases last year, and corrective measures are being studied.

Mrs. Doehler enrolled 178 new patients in her esophageal voice classes this year. She continues to lecture to physicians, nursing groups, medical students and speech therapists, and she is internationally prominent for her work in this special field.

The Tumor Clinic convenes weekly on the second floor of the Massachusetts General Hospital. They are now at about the half way mark on a ten year study of the efficacy of combined radiation therapy and surgery for the management of carcinoma of the hypopharynx.

Dr. Balogh of the Mosher Pathology Laboratory has examined 1,677 histological specimens during the past year.

Miss Diana Mills has directed the Audiology Department following the resignation of Mrs. Chasin. Last year 5,816 patients were tested, of which 2,257 were private and 3,375 were service cases.

The Otoneurology Department, under the direction of Dr. Alfred Weiss, has experienced steady growth showing a census of 250 private patients and 250 service patients last year.

The Social Service Department, under the direction of Miss Shipsey, consulted on 1,032 patients for the Department of Otolaryngology, an increase of 315 over last year. Among the services rendered were 2,477 interviews, 3,912 telephone

calls and 2,608 consultations with other hospital staff members.

In the Children's Hospital residency rotation, under the direction of Dr. Carlyle Flake, 2,276 out-patients were examined and 381 operative procedures were performed. In the Beth Israel Hospital rotation, the resident examines about 40 out-patients and performs five surgical procedures per week, all under the direction of Dr. Werner Chasin. The rotation at Peter Bent Brigham Hospital, under Dr. Sydney Shore's supervision shows a steady increase in both out-patient and in-patient census.

Some of the clinical highlights for the past year might be summarized as follows:

1. The development of biochemical tests of inner ear fluid as a diagnostic aid for Meniere's disease and acoustic neurinoma.
2. Improved surgery for acoustic neurinoma via the translabyrinthine route.
3. Techniques for improved excision of malignant tumors.
4. The use of ultrasound treatment for the management of Meniere's disease.
5. Intranasal surgery for the control of cerebrospinal rhinorrhea.
6. Vidian nerve section for improvement of nasal obstruction.
7. Reconstruction of the cervical esophagus following surgical resection for malignancy.

The Teaching Program

During the past several years there has been an increasing interest in Otolaryngology as a specialty within the field of medicine. This is particularly evident in the increased number of applicants for our Residency Training Program. Although this is a nationwide trend, our department is in a particularly enviable position to attract outstanding applicants because of the outstanding teaching staff and the opportunities for research.

In order to keep pace with this increasing demand for training in Otolaryngology we are planning to increase the number of elective courses available to students.

The Research Laboratories

The Eaton-Peabody Laboratory of Auditory Physiology (Kiang) is the largest laboratory in the Department. On October 17, 1966 a dedication ceremony was held on the occasion of an addition to the laboratory. Currently this laboratory occupies 4,800 square feet of space and has twenty one research personnel. The principal interest of this group is the electrophysiological responses of the cochlea, auditory nerve, cochlear nucleus and superior olivary complex.

In the Otopathology Laboratory a major project has been a continuing study of human middle ear and inner ear disease (Schuknecht, Murakami, Allam). During the past year the temporal bones of 60 patients who suffered from ear disease during life were added to the burgeoning collection. Other problems

under study are: possible effects of collaginase on bone resorption in cholesteatoma (Abramson); the effect of nitrogen mustard on the inner ear (Cummings); the cause of positional vertigo (Wilson); the fate of gelfoam in the inner ear (Kylander); the neural projection pattern of the vestibular endorgans (Gacek); methods for creating permanent perforations of the tympanic membrane (Gross); the biochemistry of inner ear (Griffin), and acid phosphatase studies of the inner ear (Ishii and Balogh).

One of the main interests in the Electronmicroscopy Laboratory (Kimura) at the present time is the possible etiologic relationship of the endolymphatic sac to Meniere's disease. The studies are not conclusive, and more work is needed.

In the Biochemistry Laboratory (Marfey), a study has been launched into the effect of audible sound waves on the structure of proteins and protein complexes which are likely to be found in the membranes of sensory cells.

The Microcirculation studies (Irwin) involve the physiology of blood flow in the inner ear and lung. Studies of laryngeal anatomy and physiology (Montgomery) and vestibular physiology (Weiss) are well on the way but at the moment there is nothing new to report.

Looking back over the past year it seems to me that the following accomplishments in research were the most important:

1. Publication of the book, "Discharge Patterns of Single Fibers in the Cat's Auditory Nerve", by Nelson Kiang, M.I.T. Press.
2. Confirmation of *Atrophy of the Stria Vascularis* as a common cause of deafness (Schuknecht)
3. Confirmation of destruction of the endolymphatic sac as a cause for endolymphatic hydrops (Kimura)
4. The finding of lipofuscin granules in the hair cells of the aging inner ear as a probable cause of deafness (Ishii, Balogh)

Our Strength and Our Future

It seems to me that much of the strength of our department is the result of strong support from several sources:

1. The academic influence of the Harvard Medical School.
2. Former and present staff members who have supported the idea that research should be done in close association with clinical work.
3. The visiting staff who give much time unselfishly to maintain a high standard in teaching at both the undergraduate and graduate levels.

To insure a satisfactory performance in the future it is necessary to increase and upgrade our hospital facilities. An addition to our existing Infirmary building is necessary if we are to keep pace with medical science and with the needs of our community. This has now become the first order of business.

Harold F. Schuknecht, M.D.
Chief of Otolaryngology

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Mrs. Victor H. Kazanjian
Mrs. Herbert W. Kelley
Mrs. Vincent J. Kelley
Mrs. Edgar H. Kent
Mrs. Edmund V. Keville
Mrs. Robert E. Klotz
Mrs. Clarence E. Knapp
Mrs. John M. Kurkjian
Mrs. Charles Lane
Mrs. Joseph Lentine
Mrs. John Lowell
Mrs. Henry Lyman, Jr.
Mrs. Alexander S. Macmillan
Mrs. Alexander S. Macmillan, Jr.
Mrs. Malcolm H. Masters
Mrs. William W. McCarthy
Mrs. David B. McClosky
Mrs. Robert Meisel
Mrs. Henry D. Minot
Mrs. G. Gardner Monks
Mrs. William W. Montgomery
Mrs. Noel Morss
Mrs. Henry A. Mosher
Mrs. Stephen P. Mugar
Mrs. Dorothy M. Newhook
Mrs. George M. Olive, Jr.
Mrs. Grafton B. Perkins
Miss Mary A. Redman
Mrs. Franklin A. Reece
Mrs. John R. Richardson
Mrs. William P. Rogers, Jr.
Mrs. Aram Roopenian
Mrs. Perry Rosenthal
Mrs. Nathan Rothenberg
Mrs. Baruch J. Sachs
Mrs. Benjamin Sachs
Mrs. Ernest J. Sargeant
Mrs. Sullivan A. Sargent
Mrs. Charles L. Schepens
Mrs. Harold F. Schuknecht
Mrs. Alfred W. Scott
Mrs. Henry R. Scott
Mrs. Javad Shamsai
Mrs. Samuel Simons
Mrs. Albert E. Sloane
Mrs. Reginald H. Smith
Mrs. Taylor R. Smith
Mrs. Leslie Soule
Mrs. Russell C. Steinert
Mrs. Willoughby Stuart
Mrs. William L. Taggart, Jr.
Mrs. Thomas C. Thacher
Mrs. John E. Thayer, Jr.
Mrs. D. Stephen Thrall
Mrs. Robert Truesdale
Mrs. Eugene L. Vail
Mrs. Lyon Weyburn
Mrs. Roy R. Wheeler
Mrs. Henry E. Wile
Mrs. Andrew N. Winslow, Jr.
Mrs. Stewart C. Woodworth

Honorary Member
Mrs. Harold Peabody

ADMINISTRATION

Director
Charles T. Wood

Assistant Director
Bruce M. Jones

Assistant Director and Comptroller
Raymond W. Lyons

Assistant Director for Resources and Development
Samuel S. Drury

Administrative Assistants, Admitting Office
Henrietta I. Olsen, R.N.
Mrs. Gail A. Sergio
Mrs. Louise Doherty, R.N.
Jennie Kaizzi, R.N.
Mrs. Ruth Dorfman, R.N.

Assistant Director in Charge of Clinics
Henry J. Murphy

Executive Officer
Ruth Farrisey, R.N.

Director of Nursing Service and Nursing Education
Barbara Czechowski, R.N.

Assistant Director of Nursing Education
Miriam Dornbirer, R.N.

Administrative Supervisor
Ruth Straitiff

Director of Medical Social Service
Madeline S. Shipsey

Accounting
Paul Peloquin

Credits and Collections
Gerald J. Clinton

Dietary
Herbert I. Kirshnit

Housekeeping
Mrs. Mary Gontarski, R.N.

Library and Archives
Charles Snyder

Maintenance
Robert Marshall

Medical Records
Joyce Gormley, R.R.L.

Optical Shop
Vincent H. Farley

Pharmacy
John Webb

Public Relations
Mrs. Eleanor F. McGowan

Purchasing and Stores
Lehan Power

Volunteers
Mrs. Elizabeth A. Houlihan

DEPARTMENT OF OPHTHALMOLOGY MEDICAL AND RESEARCH STAFFS

Chief of Ophthalmology
David G. Cogan, M.D.

Associate Chief of Opthalmology
Carl C. Johnson, M.D.

Surgeons in Ophthalmology
Mahlon T. Easton, M.D.
Garrett L. Sullivan, M.D.
Albert E. Sloane, M.D.
Carl C. Johnson, M.D.
Earl S. Seale, M.D.
Harry E. Braconier, M.D.

Associate Surgeons in Ophthalmology
Henry F. Allen, M.D.
W. Morton Grant, M.D.
Sumner D. Liebman, M.D.
Abraham Pollen, M.D.
Charles L. Schepens, M.D.
Joseph M. Clough, M.D.
Karl Riemer, M.D.
Henry A. Mosher, M.D.
Francis J. West, M.D.
Robert J. Brockhurst, M.D.
Taylor R. Smith, M.D.
Alfred W. Scott, M.D.
Charles H. MacLaughlin, M.D.

Assistant Surgeons in Ophthalmology
David H. Scott, M.D.
Warren D. Haley, M.D.
Thomas P. Cronin, M.D.
John M. Hills, M.D.
Arthur M. Morrissey, M.D.

*On Leave of Absence

Ichiro D. Okamura, M.D.
D. Robert Alpert, M.D.
Charles D.J. Regan, M.D.
David D. Donaldson, M.D.
S. Arthur Boruchoff, M.D.
Paul M. Runge, M.D.
Bertha Offenbach, M.D.
Richard B. Chapman, M.D.
Claes H. Dohlman, M.D.
Irving L. Pavlo, M.D.
Byron S. Lingeman, M.D.
George M. Olive, Jr., M.D.

Assistants in Ophthalmology
Lloyd M. Aiello, M.D.
Arthur F. Calnan, M.D.
John M. Carroll, M.D.
Eugene C. Ciccarelli, M.D.
H. MacKenzie Freeman, M.D.
Carl Gates Freese, Jr., M.D.
George E. Garcia, M.D.
John R. Gehring, M.D.
Ralph H. Hinckley, M.D.
*Roland E. Houle, M.D.
Paul D. Hurley, M.D.
B. Thomas Hutchinson, M.D.
Robert S.L. Kinder, M.D.
Robert C. Lawlor, M.D.
*Howard M. Leibowitz, M.D.
*Simmons Lessell, M.D.
Irwin T. Mancall, M.D.
J. Wallace McMeel, M.D.
Ernst J. Meyer, M.D.
David Miller, M.D.
Robert A. Petersen, M.D.
Silvio R. Pirquet, M.D.
Robert D. Reinecke, M.D.
Richard M. Robb, M.D.
Perry Rosenthal, M.D.
Baruch J. Sachs, M.D.
Richard J. Simmons, M.D.
Donald R. Weis, M.D.
Michael Wiedman, M.D.
Jeremy B. Whitney, M.D.

Residents in Ophthalmology
Richard F. Brubaker, M.D.
William J. Collis, M.D.
Bruce A. Ellingsen, M.D.
Stephen J. Fricker, M.D.
Joseph C. Kim, M.D.
George W. Lazenby, III, M.D.
Laurus W. Lehwalder, M.D.
Anthony B. Nesburn, M.D.
Robert E. O'Connor, M.D.
Ronald C. Pruett, M.D.
Arturo R. Quevedo, M.D.
John W. Reed, M.D.
C. Reid Roberts, M.D.
Thomas B. Souders, M.D.
Karl F. Stephens, M.D.
Richard A. Thoft, M.D.
Nicholas C. Trotta, M.D.
David S. Walton, M.D.
David McQ. Worthen, M.D.

Fellows in Ophthalmology
Busharat Ahmad, M.D.
S. Percy Amoils, M.D.
Vitaliano B. Bernardino, M.D.
Walter D. Cockerham, M.D.
Ide Dubé, M.D.
Jerome N. Goldman, M.D.
William M. Haining, M.D.
Kenneth R. Hovland, M.D.
Harold N. Jacklin, M.D.
Charimet Kanchanaranya, M.D.
Nisit Leelawongs, M.D.
José D. Peczon, M.D.
Howard L. Tanenbaum, M.D.
Wichard A.J. Van Heuven, M.D.
George Vlachos, M.D.
Lawrence E. Weene, M.D.
Philip H. Zweifach, M.D.

Consulting Chiefs of Ophthalmology
Frederick H. Verhoeff, M.D.
Edwin B. Dunphy, M.D.
Paul A. Chandler, M.D.

Senior Consulting Surgeons
Trygve Gundersen, M.D.
William P. Beetham, M.D.
Virgil G. Casten, M.D.
Brendan D. Leahey, M.D.

Honorary Staff
Edward E. Covitz, M.D.,
Assistant Surgeon in Ophthalmology
Paul G. Haire, M.D.,
Assistant Surgeon in Ophthalmology
Linley C. Happ, M.D.,
Assistant Surgeon in Ophthalmology
Julian F. Chisholm, Jr., M.D.,
Assistant Surgeon in Ophthalmology

Ophthalmic Resident Teaching
Paul A. Chandler, M.D.,
Associate Director

Glaucoma Consultation Service
W. Morton Grant, M.D., *Director*

Retina Service
Charles L. Schepens, M.D., *Director*

Cornea Service
Claes H. Dohlman, M.D., *Director*

Refraction Clinic
Robert D. Reinecke, M.D., *Director*

Scleral Contact Lens Service
John M. Carroll, M.D.

Corneal Contact Lens Service
Perry Rosenthal, M.D.

Ocular Motility Clinic
Ann E. Stromberg, *Orthoptist*

Ophthalmic Pathology
Taylor R. Smith, M.D., *Director*
Toichiro Kuwabara, M.D., *Assistant*

Senior Consulting Ophthalmic Pathologist
Parker Heath, M.D.

Howe Laboratory of Ophthalmology
David G. Cogan, M.D.
W. Morton Grant, M.D.
Jin H. Kinoshita, Ph.D.
Toichiro Kuwabara, M.D.
David D. Donaldson, M.D.
Robert D. Reinecke, M.D.
Liane Reif, Ph.D.
John M. Carroll, M.D.
B. Thomas Hutchinson, M.D.
Judith A. Jedziniak, Ph.D.
Marjorie F. Lou, Ph.D.
Lorenzo O. Merola, B.S.

Special Fellows
Arthur M. Clements, M.D.
William M. Haining, M.D.
Philip H. Zweifach, M.D.

Pre-Clinical Trainees
Gordon J. Johnson, M.D.
Brent W. Lambert, M.D.
Deborah P. Langston, M.D.
Joseph Michon, Jr., M.D.

Research Associate, Retina Service
Ernst G. Wolf, Ph.D.

DEPARTMENT OF OTOLARYNGOLOGY MEDICAL AND RESEARCH STAFFS

Chief of Otolaryngology
Harold F. Schuknecht, M.D.

Surgeons in Otolaryngology
John R. Richardson, M.D.
J. Charles Drooker, M.D.
Daniel Miller, M.D.
Donald K. Lewis, M.D.
John E. McKeigue, M.D.
Bernard Zonderman, M.D.
William W. Montgomery, M.D.

Associate Surgeons in Otolaryngolgy
Herman J. Sternstein, M.D.
Aram Roopenian, M.D.*
Charles Kent, M.D.
Robert E. Klotz, M.D.
Sidney R. Wilker, M.D.
Anthony Zovickian, M.D.*
William L. Hayden, M.D.
Thomas R. Klein, M.D.
Robert H. Lofgren, M.D.
Alfred L. Hurst, M.D.

Assistant Surgeons in Otolaryngology
Elizabeth DeBlois, M.D.
Hugo D. Angelini, M.D.
Louis E. Griffey, M.D.
Geza J. Jako, M.D.
John C. Trakas, M.D.
Yale J. Berry, M.D.
Allan G. Edwards, Jr., M.D.
Richard R. Gacek, M.D.
Roy A. Johnson, M.D.
John M. Kurkjian, M.D.

Assistants in Otolaryngology
Frank W. Brady, M.D.
Werner D. Chasin, M.D.
Robert W. Clubb, M.D.
Charles W. Gross, M.D.
Lawrence S. Hirsch, M.D.
Donald G. Keamy, M.D.
David L. Pierce, M.D.
Daniel J. Reagan, M.D.
Mendell Robinson, M.D.
Sydney Shore, M.D.
Morris Swartz, M.D.
Albert Weiser, M.D.
Alfred D. Weiss, M.D.**

Residents in Otolaryngology
Maxwell Abramson, M.D.
Edward L. Applebaum, M.D.
William N. Campbell, M.D.
Charles W. Cummings, M.D.
Warren L. Griffin, M.D.
C. Edward Jackson, M.D.
Robert L. Katz, M.D.
Clarence E. Kylander, M.D.
John Lynch, M.D.
David Metzner, M.D.
Rufus C. Partlow, Jr., M.D.
Richard D. Salerno, M.D.
Earl F. Singleton, M.D.
Gershon J. Spector, M.D.
John J. Stavros, M.D.
William R. Wilson, M.D.

Consulting Chiefs of Otolaryngology
LeRoy A. Schall, M.D.
Philip E. Meltzer, M.D.

Senior Consulting Surgeons
Frederick L. Bogan, M.D.
Edwards W. Herman, M.D.
Philip Mysel, M.D.
Lyman G. Richards, M.D.
Moses H. Lurie, M.D.
Robert L. Goodale, M.D.
Carl H. Ernlund, M.D.
Charles H. Allman, M.D.
Maurice G. Evans, M.D.
Francis L. Weille, M.D.
Vincent J. Kelley, M.D.
Edgar M. Holmes, M.D.
Walter J.E. Carroll, M.D.
John R. Frazee, M.D.
Joseph Lentine, M.D.

Senior Consulting Surgeon for Plastic Operations
Varaztad H. Kazanjian, M.D.

Geographic Full-Time Staff for the Department of Otolaryngology
Harold F. Schuknecht, M.D.
William W. Montgomery, M.D.
Richard R. Gacek, M.D.
Alfred D. Weiss, M.D.
Charles W. Gross, M.D.

*Plastic Operations
**Neurology

Surgeon for Bronchoscopy and Esophagoscopy
William W. Montgomery, M.D.

Surgeon for Tumor Clinic
Daniel Miller, M.D.

Audiologist
Diana L. Mills, M.A.

Director of Esophageal Voice Classes
Mrs. Paul A. Doehler

Director of Otolaryngological Pathology
Karoly Balogh, Jr., M.D.

Eaton-Peabody Laboratory of Auditory Physiology
Walter A. Rosenblith, *Ing. Rad.*
Nelson Y-s. Kiang, Ph.D.
Donald K. Morest, M.D.
William T. Peake, Sc.D.
Thomas F. Weiss, Ph.D.
William B. Warr, Ph.D.
Robert M. Brown, B.S.
Alan H. Crist, B.S.
Donald P. Langbein, B.S.
James E. Evans, S.M.
John J. Guinan, Jr., S.M.
Harvey S. Sohmer, Ph.D.
Michael Wiederhold, S.M.

Microcirculatory Laboratory
John W. Irwin, M.D.
Walter S. Burrage, M.D.
Hilmi Arslan, M.S.

D. Harold Walker Laboratory of Biochemistry
S. Peter Marfey, Ph.D.

Histopathology Laboratory
Harold F. Schuknecht, M.D.
William W. Montgomery, M.D.
Richard R. Gacek, M.D.
Yoshihiko Murakami, M.D.

Histochemistry Laboratory
Karoly Balogh, Jr., M.D.

Electron Microscopy Laboratory
Robert S. Kimura, B.A.

Clinical Fellow in Otolaryngology
Alan G. Kerr, F.R.C.S.

Research Fellows in Otolaryngology
Abdel F. Allam, M.B., B.ch.
Daiji Ishii, M.D.

Medical Staff Common To Both Services

Director of Anesthesiology
John C. Snow, M.D.

Assistant Anesthesiologists
Alice H. Parsons, M.D.
Javad Shamsai, M.D.
Leo T. Kelly, M.D.

Fellows in Anesthesiology
Ronaldo Machado, M.D.
Ismet Sakarya, M.D.
Erhan Erdem, M.D.
Mehmet Duymazlar, M.D.
Jose A. Abreu, M.D.
Romulo E. Silva, M.D.

Director of Radiology
Alexander S. Macmillan, Jr., M.D.

Senior Consulting Roentgenologist
Alexander S. Macmillan, M.D.

Microbiologist
Anita Mangiaracine, A.B.

The members of the medical staff of the Massachusetts General Hospital are consultants to the Infirmary, and in this capacity become a part of the staff of the Massachusetts Eye and Ear Infirmary.

Boston Eye Bank

Serving New England

General Director
S. Arthur Boruchoff, M.D.

Executive Secretary
Margaret G. Zink

Executive Committee
David G. Cogan, M.D.
Mrs. Richard Cary Curtis
Claes H. Dohlman, M.D.
Weston Howland, Jr.
Brendan D. Leahey, M.D.
Henry Hixon Meyer
Mrs. William A. Slade, Jr.

1967 SERVICE AWARDS

Medical Staff
Twenty-five Years
Carl C. Johnson, M.D.
Surgeon in Ophthalmology
Paul M. Runge, M.D.
Assistant Surgeon in Ophthalmology

Non-Medical Staff
Twenty Years
Mary Geswell, R.N., *Nursing*
Raymond W. Lyons, *Administration*
Margaret Rock, R.N., *Nursing*

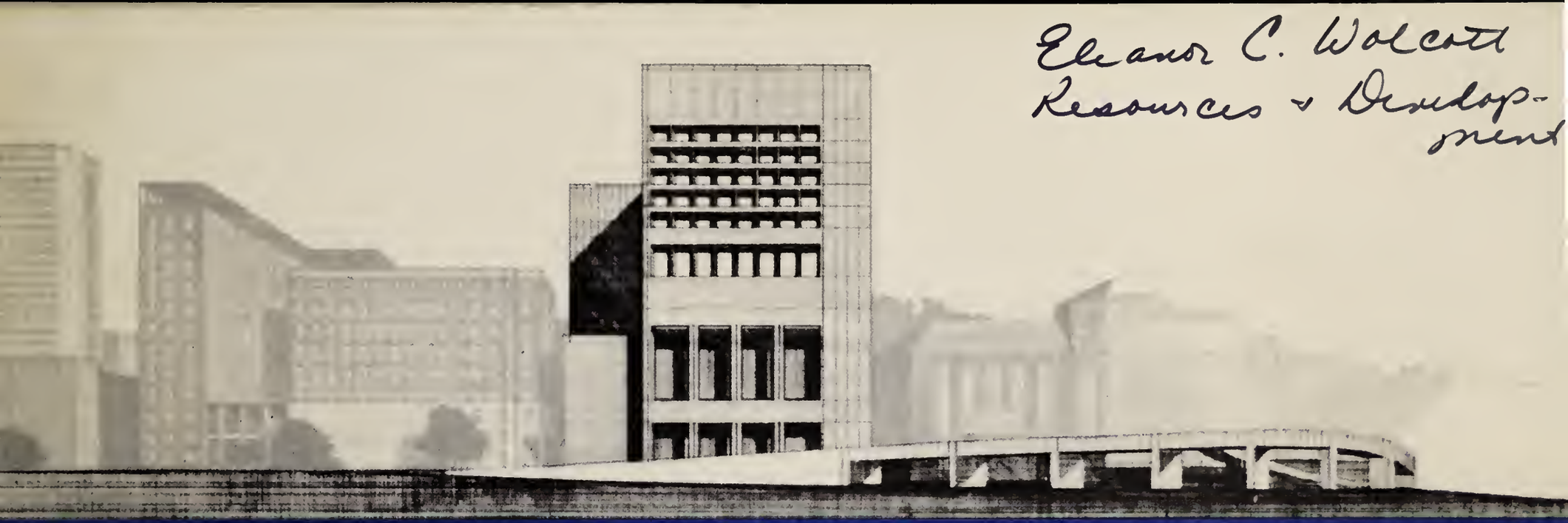
Ten Years
Irene Andrews, *Nursing*
Elizabeth Barron, *Nursing*
Julia Bowen, R.N., *Nursing*
Edith Conley, R.N., *Nursing*
Dorothy Crosby, R.N., *Nursing*
Jean Pomeroy, R.N., *Nursing*
Joel Swanson, *Maintenance*

IN MEMORIAM

THOMAS CAVANAUGH, M.D.
July 9, 1909 — September 20, 1966
1938 — Ophthalmic Resident
1940 — Senior Clinical Assistant in Ophthalmology
1946 — Assistant Surgeon in Ophthalmology
1959 — Associate Surgeon in Ophthalmology
1965 — Surgeon in Ophthalmology

RALPH H. RUGGLES, M.D.
April 27, 1896 — September 24, 1966
1919 — Ophthalmic Resident
1920 — Clinical Assistant in Ophthalmology
1924 — Assistant Surgeon in Ophthalmology
1935 — Associate Surgeon in Ophthalmology
1950 — Consulting Surgeon in Ophthalmology

Eleanor C. Wolcott
Resources + Development



MASSACHUSETTS EYE and EAR INFIRMARY

ANNUAL REPORT · 1967

The Massachusetts Eye and Ear Infirmary is the second oldest hospital in the United States specializing in the treatment of diseases and other conditions of the eye and of the ear, nose and throat. It was established in 1824 as a free clinic for the treatment of the eye by Dr. Edward Reynolds and Dr. John Jeffries. The Infirmary was incorporated in 1827, and after years of steady expansion, the present building on Charles Street was constructed in 1899.

The Infirmary is a voluntary hospital — an independent, non-profit, private institution. Neither the Trustees nor the Board of Managers are paid, and the Medical Staff of specialists gives its services without charge to patients in the Clinics and to those patients who come into the hospital "on service." The hospital receives no support from city or state but is financed by receipts from patients or public agencies responsible for them, by voluntary gifts and bequests, and by our allotment from the United Community Services as a participating agency. However, the Infirmary's quota from the United Community Services is far below the amount the hospital gives in "free service" to patients from the Greater Boston area who cannot pay for their own care.

Though they are separate institutions, the Infirmary and its neighbor, the Massachusetts General Hospital, cooperate to give complete medical service to patients. The Clinics of both hospitals share a common Admitting Office with its entrance on Fruit Street.

The Cover: A dramatic new Massachusetts Eye and Ear Infirmary building will rise on the Boston skyline as a result of the current Building Fund Campaign. Shown as the architect envisions its appearance from across the Charles River, the new building is described further in the Report of the President and the Report of the Director.

MASSACHUSETTS EYE and EAR INFIRMARY

Second

ONE HUNDRED AND FORTY-~~FIRST~~

ANNUAL REPORT

FOR YEAR ENDED SEPT. 30, 1967

REPORTS FOR 1967

STAFF AND OFFICERS FOR 1968

AS OF DECEMBER 6, 1967

243 CHARLES STREET • BOSTON, MASSACHUSETTS 02114

TRUSTEES

(Dates indicate year of appointment)

Hon. Leverett Saltonstall	1925	William Ehrlich	1955
Walter H. Trumbull	1929	Richard Harte	1955
Robert F. Bradford	1934	Weston Howland, Jr.	1955
William A. Parker	1935	William L. Saltonstall	1957
Henry Hixon Meyer	1937	Leslie Soule	1957
Mrs. Richard Cary Curtis	1940	Mrs. Walter C. Dodge	1963
Horace W. Frost	1940	Thomas B. Frost	1963
Hon. Edmund V. Keville	1942	John S. Howe	1963
Frederic Winthrop	1943	Frederick H. Lovejoy	1963
Mrs. Sullivan A. Sargent	1945	Thomas Allsopp	1963
William H. Claflin, III	1947	Frank S. Christian	1965
Mrs. John W. Farley	1948	George M. Lovejoy, Jr.	1965
~~William F. Keesler, Jr.~~ June 30 1967	1948	Mrs. John Lowell	1965
Arthur T. Lyman	1948	Frederick C. Rozelle, Jr.	1965
The Rev. Robert G. Metters	1948	George C. Seybolt	1965
August R. Meyer	1948	Francis S. Hill	1966
Miss Amelia Peabody	1948	Robert Bacon	1966
Frederick H. Verhoeff, M.D.	1948	James I. Summers	1966
Nathaniel Faxon, M.D.	1949	Leo F. Daley	1966
Francis W. Hatch, Jr.	1951	Paul A. Chandler, M.D.	1967
Robert H. Hopkins*	1951	Edwin B. Dunphy, M.D.	1967
George L. Pew	1951	Mrs. Bartlett Harwood	1967
Howland S. Warren	1951	Henry G. Lapham	1967
Melville Chapin	1951	John M. Lord	1967
George A. McLaughlin	1952	LeRoy A. Schall, M.D.	1967
Henry K. Porter	1952	William F. Spang	1967
Mrs. Francis T. Hunter	1953	John I. Taylor	1967
Mrs. Varaztad H. Kazanjian	1953	Monte J. Wallace	1967
Richard P. Chapman	1955		

* Deceased

BOARD OF MANAGERS

Henry Hixon Meyer, *Chairman*

William H. Claflin, III, *President*

Horace W. Frost, *Treasurer*

Hon. Edmund V. Keville, *Secretary*

*Fred A. Baumeister

Melville Chapin

Mrs. Richard Cary Curtis

**Robert H. Hopkins

George M. Lovejoy, Jr.

William A. Parker

Henry K. Porter

*John Ryan

Walter H. Trumbull

Frederic Winthrop

* Appointed by the Commonwealth
** Deceased

DIRECTOR

Charles T. Wood

CHIEFS OF SERVICE

Henry J. Allen
~~David G. Cogan, M.D., *Ophthalmology*~~

Harold F. Schuknecht, M.D., *Otolaryngology*

REPORT OF THE PRESIDENT

During the year ended September 30, 1967, and continuing since then, the major concern of the Trustees has been the planning for the Infirmary of the future. This falls into two principal categories — architectural and financial — which, though distinctly separate, are closely interwoven and interdependent. Together they add up to an overdue solution of the Infirmary's long-standing space problem.

Just about a year ago, the Board accepted a unique and ingenious feasibility study by the Memphis, Tennessee, firm of Walk Jones/Mah and Jones/Architects, Inc., which indicated that the Hospital could be expanded in its present location while remaining in operation. The plan envisioned the construction of a new building based on the limited land area behind the present main building and extending up and over the old five-story structure to a height of twelve stories. The architects were then commissioned to pursue this concept through the schematic design phase. A prerequisite of this plan would be the removal of several small structures to clear the site and the relocation of the Eaton-Peabody and Microcirculatory research laboratories in a low-rise structure containing some 12,000 gross square feet to be constructed on the parking lot adjacent to the nurses' residence. Thus, the future of the Eaton-Peabody Laboratory,

William H. Claflin, III
President

in which we share partnership with the Massachusetts Institute of Technology, would be assured. The architects have blocked out gross areas needed for the various patient care, teaching and research needs of the hospital which would increase total space from 105,660 square feet in the main and connecting buildings to a new total of 363,220 square feet by the construction of 257,560 new square feet of space. This plan, which would more than triple the space now available, was also approved by the Trustees Building Committee, and again the architects have been commissioned to move forward with development of the design into the stage of planning required for reasonably accurate estimating of the cost and for fund-raising purposes.

In pursuing this plan, the Trustees recognize the difficulty and extra cost of construction in a limited area but believe that, despite these drawbacks, it presents the best solution for the Infirmary's long-term future. The reaction of the professional staff toward this plan is generally favorable, and many of our doctors are actively working on a multitude of sub-committees, each devoted to making recommendations as to space utilization to be passed on to the Staff and Trustees Building Committees for implementation by the architects.

More recently your Trustees began actively to face the problem of financing the proposed expansion. We have retained Ketchum, Inc., as our professional fund-raising counsel who initially undertook a survey in order to be able to make professional recommendations on how to proceed and what would be attainable goals. Some 80 persons, including Trustees, Administration, Professional Staff and prominent citizens in the community, were interviewed. From the information obtained, Ketchum, Inc., recommended a financial package of approximately $16,000,000. It is not possible at this time to determine what can be constructed and equipped for this amount, but we expect that we can provide adequately for the present and have some unfinished space for future expansion.

While there were many actions taken during the year apart from our efforts to solve the space problem, I shall mention only one because of its special significance. At the instigation of the Medical Staff, the Board acted to discontinue the sale of cigarettes and other tobacco products throughout the Infirmary. In this matter, the attitude of the Ladies Visiting Committee was particularly commendable as the prohibition was detrimental to the sales and profits of their Gift Shop. This action was not aimed at stopping smoking in the hospital, but to put the institution on public record as being in agreement with published findings that cigarette smoking constitutes a serious health hazard.

In closing, I should like to thank our staff, employees, Trustees, Ladies Visiting Committee, and friends for their extra cooperation during the year. Superimposed on the day-to-day functions of our Hospital has been the special effort required of many to prepare for our building program.

As we go into the even more difficult year ahead, with the added burden of raising the necessary funds, this willingness of everyone to make the extra effort is the really great asset that will determine our success.

William H. Claflin, III
President

December, 1967

REPORT OF THE TREASURER

Horace W. Frost
Treasurer

BALANCE SHEET

September 30, 1967

Assets

Cash in Bank and on Hand		$ 1,328,899.44
Investments in Securities — Book Value		8,563,240.71
Accounts Receivable:		
Patients — less reserve for doubtful accounts	$ 633,199.49	
Miscellaneous	960.67	634,160.16
Inventories of Supplies, etc.		60,826.60
Unamortized Pension Costs (see note)		123,817.35
Plant:		
Land and buildings	$3,711,452.66	
Furniture, fixtures and equipment	634,851.46	
	$4,346,304.12	
Less: Reserve for depreciation	1,695,711.92	2,650,592.20
Construction in Progress		95,724.23
TOTAL		$13,457,260.69

Liabilities and Funds

Advances from Patients	$ 9,677.53
Accounts Payable and Accruals	235,123.26
Reserve for Contingencies	80,000.00
Special Funds	9,529.20
General Fund	2,460,569.86
General Pension Reserve	984,709.92
Permanent Funds — Income Restricted	1,610,868.26
Permanent Funds — Income Unrestricted	2,769,331.36
Special Purpose Funds	628,932.81
Unexpended Restricted Income of Permanent Funds	270,470.05
Temporary Funds	854,011.67
Funds Invested in Plant	2,650,592.20
Plant Depreciation Fund	255,565.09
Undistributed Security Gains	637,879.48
TOTAL	$13,457,260.69

NOTE:

Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments were chargeable to future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of $16,400 over the estimated average remaining service lives of participants from that date.

CONDENSED INCOME ACCOUNT

for the year ended September 30, 1967

Gross Charges for Services to Patients		$4,840,735.06
Adjustments to Gross Charges:		
Allowances to patients	$181,903.65	
Allowances to contracting agencies	97,087.85	
Allowances to Blue Cross	30,716.13	
Provision for uncollectible accounts	20,569.83	330,277.46
Net Revenue from Services to Patients		$4,510,457.60
Other Operating Revenue		238,951.09
Total Operating Revenue		$4,749,408.69
Hospital Operating Expenses (including provision for depreciation — $157,179.56)		4,930,054.35
Hospital Operating Loss		$ 180,645.66
Donated Income:		
United Community Services	$ 29,465.00	
Estates of Elisha V. Ashton, Samuel C. Howes, G. Gorham Peters and others	25,561.47	55,026.47
Hospital Net Loss		$ 125,619.19
Unrestricted Investment Income from Permanent Funds, less Applicable Expenses		372,039.59
Investment Income in Excess of Hospital Net Loss — before Provision for Contractual Adjustments		$ 246,420.40
Provision for Contractual Adjustments — Note B		80,000.00
Net Investment Income Balance — Transferred to General Fund		$ 166,420.40

NOTE A

During the period, hospital expenses aggregating $57,466.35 were charged directly against Permanent and Temporary Funds as follows:

Against Permanent Funds — Income	$43,742.40
Against Temporary Funds	13,723.95
	$57,466.35

NOTE B

The Infirmary renders patient care services under contracts with third party agencies, insurers, Medicare programs, etc., at provisional rates which are subject to adjustment after audit. It also engages in research activities under contracts with U. S. Government agencies, the reimbursed costs of which are subject to post-performance review and adjustment. The administrative officials of the Infirmary believe that approximately $80,000 of amounts reflected in its operating income may be subject to recovery by virtue of provisions of its various contracts and have provided therefor in the accompanying financial statements.

AUDITORS' CERTIFICATE

Massachusetts Eye and Ear Infirmary
Boston
Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 30, 1967 and the related income account for the year ended at that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related condensed income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1967 and the results of its operations for the year ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

PATTERSON, TEELE & DENNIS

January 8, 1968

SUMMARY OF SECURITIES

September 30, 1967

	Book Value*	Mkt. Value*	% Mkt. Value
GENERAL FUND			
BONDS			
U. S. Government	$3,333,172	$ 3,231,029	24.23
Canadian Government	29,400	25,650	.20
Railroad	165,224	127,600	.96
Utility	1,283,650	1,139,357	8.54
Industrial	435,221	381,026	2.85
Financial	206,065	179,320	1.34
Miscellaneous	62,900	not valued	—
TOTAL BONDS	$5,515,632	$ 5,083,982	38.12
TOTAL PREFERRED STOCKS	$ 147,519	$ 139,560	1.04
COMMON STOCKS			
Railroad	$ 116,048	$ 320,857	2.41
Utility	522,757	1,326,765	9.95
Industrial	1,448,687	5,101,734	38.25
Financial	313,423	747,839	5.61
Insurance	159,912	349,797	2.62
Miscellaneous	25,000	59,825	.45
TOTAL COMMON STOCKS	$2,585,827	$ 7,906,817	59.29
TOTAL GENERAL FUND	$8,248,978	$13,130,359	98.45
WEBER FUND (Bonds)	$ 12,132	$ 11,649	.09
WINTHROP FUND (Bonds & Stocks)	$ 104,936	$ 194,548	1.46
TOTAL SECURITIES	$8,366,046	$13,336,556	100.00

* — cents omitted

HORACE W. FROST
Treasurer

REPORT OF THE DIRECTOR

It gives me great pleasure to present my second Annual Report, for the 143rd year of the Massachusetts Eye and Ear Infirmary. While there has been great activity in the area of planning for our new facility and tremendous changes nationally in the concepts of medical-care delivery, we nonetheless have continued and expanded our daily operations without additional space.

This year saw the Infirmary continue to automate with its computer in the areas of payroll, inventory, accounts receivable, bed-scheduling, general accounting, research accounting, and certain other research projects. The computer is now billing Blue Cross and Medicare automatically. This has made it possible to decrease our staff in Patients Accounts and also to receive our reimbursement much sooner.

By far, the most significant development in the area of operations was the bed-scheduling project. Mrs. Rose Rich was appointed to head the scheduling office in March. Because of the statistics, the calculations, and the paper work the computer can produce, and the wonderful cooperation of the Medical Staff, we were able to increase the utilization of our facilities by 3% bringing us to an occupancy factor of 87%. This is about 9.5% above the national average for all short-term hospitals and 21.2% above the national average for hospitals of our specialty. We were able to admit 678 more patients this year than last year and we provided 1,487 more patient days of service. At the same time the average length of stay in

Charles T. Wood
Director

the Hospital dropped from 5.33 days to 5.17. Although it was necessary to increase our rates for daily services by $4.00 for the ensuing year, I am convinced that the increase would have been three times that figure had it not been for the work of the Utilization Committee in helping us to get the best possible utilization of our limited number of beds.

Another area of growth in patient services was our Emergency Ward. Visits there increased by 2,741 to an all-time high of 17,511 emergency patients treated. X-Rays were up by 1,000, clinical laboratory tests rose 4,000, and bacteriological tests increased by 400. Our Dietary Department also had a tremendous increase this year. Five thousand more meals were served over the previous year, bringing the total up to 293,360. They also catered to 250 gatherings in addition to their regular work of providing service to patients and employees. The cafeteria meals increased by 2,269 from last year's figure of 148,484. In general, the Infirmary is still growing and meeting the medical, social, and administrative demands of our patients even though we are terribly cramped for space.

This year was also the year of the triennial survey by the Joint Commission on Accreditation of Hospitals. We were inspected in July and I am happy to report that the Infirmary has been accredited for three more years. In fact, only minor recommendations were made. We are especially grateful for the effective leadership of Dr. Sidney Wilker, chairman of our Medical Records Committee. While med-

ical records are of prime importance in accreditation, other important areas are medical evaluation and utilization.

The Nursing Department continues its excellence in patient care as well as education in our specialties. While the ability to secure operating room nurses remains a problem, we continued to be adequately staffed for floor care. Since October 1, 1966, twenty-eight nurses have been attracted to our staff and 21 are still practicing their profession at the Infirmary. The Nursing Department trained 23 registered and practical nurses in the post-graduate course of our specialties. Eight of these nurses remained at the Infirmary while the others either returned to their home hospital or sought eye and ear, nose and throat nursing at other institutions.

We have revived the interest of other hospitals in eye, ear, nose, and throat nursing to the point of their sending students to the Infirmary. We have had 14 students from the Massachusetts General Hospital, 23 from McLean, 42 from Framingham Union, and three from Burbank Hospital in Fitchburg. These are one-day sessions but they, nevertheless, afford the students with an appreciation for the special problems of eye, ear, nose, and throat nursing and provide a stimulus to our own staff. As was mentioned before, there continues to be a shortage of personnel in the operating rooms. To fill this gap, our Nursing Department initiated in November of 1966 a Surgical Technician Program. Special thanks should go to Miss Lorraine Brown, our Clinical Instructor in the Operating Rooms, who completely planned the course and, although it had a meager beginning in numbers because of space and a tight budget, three young women recently successfully completed the one-year course and are now functioning effectively as part of the operating room staff.

Our Department of Public Relations had a real boost this year. Mr. James I. Summers, a newly elected Trustee, has acted as an advisor to the Department and has greatly helped our effectiveness. In addition to a first-class annual report, the Infirmary enjoyed national publicity on two occasions and Boston area publicity on 16 occasions. These special projects were in addition to the regular work of producing the numerous publications from personnel handbooks to patient information pamphlets.

The Social Service Department continues its good work in serving the varying needs of our patients. Of special note is their work on intra-hospital communications. Patient Care Conferences have been in operation between the Nursing and Social Service Departments. Their goal is the early identification of patients with special needs and problems related to their medical situation and, through this sharing of information, the development of more effective joint planning of the management of the patient's care.

Our Volunteer Department was revitalized with the addition of a full-time Volunteer Director. The number of volunteers almost doubled and they contributed 12,768 hours, as compared to 11,515 hours in the previous year. It is unfortunate that this report does not have room to elaborate on the Volunteer Service. We inaugurated a new and vigorous volunteer program last year in the hope that we could improve service to patients. The program has proved very worthwhile, but there are still some new trails to be blazed. One hope remains: that our volunteer service on the nursing floors would continue to increase in order to relieve our nurses of some of the tasks that others could perform.

There were significant changes this year that affected our personnel. First of all, there was a general pay increase for all employees and House Staff amounting to $520,000. The House Staff increases came about as a result of the policy of all member hospitals of the Greater Boston Hospital Council concerned with paying stipends to medical House Staff that would enable them to live while in training without going too deeply into debt. The other general pay increases were in line with the policy of keeping the hospital's salaries and wages in a competitive position with other local institutions and industry.

A new and better Pension Plan was adopted this year which generally increases pension credits for everyone, but by a greater percentage for the persons in the lower income groups. The new plan increased credit on the first $4,800. of salary from 1% to 2% of a person's salary for each year worked.

Turning from people to bricks, we have focused primarily on planning new facilities

but have continued to keep the present plant in good shape. A 12-ton air conditioner was installed in the Central Supply Room to replace an old and inadequate 7½-ton unit. A new 1-100 KVA transformer was added to assure us adequate electrical power for the additional air conditioning units being installed throughout the hospital. The excitement, however, has been in the new development plans. On December 7th, the Board of Trustees voted to secure the services of the firm of Walk Jones/Mah & Jones/Architects/Inc. of Memphis, Tennessee and later gave them direction to proceed with the development of plans for building in the backyard to a height of 12 stories on our present site. This was done after several talks with representatives of the Massachusetts General Hospital and investigation of five different new sites around the periphery of the General Hospital. A decision to build on our present site affords the Infirmary the flexibility of the continuing use of the present structure while we are under construction and allows building to proceed in stages as funds become available.

In August, the architects presented the Trustees with a schematic plan for the new building showing Ambulatory Services in the basement and first floor, offices both administrative and clinical on the second floor; library, auditorium and other teaching facilities on the third floor; research on the fourth and fifth floors; and a new in-patient hospital from the 6th floor through 12. At the same time, our present 4th, 5th, 6th and 7th floors of research space built on top of Massachusetts General's Connecting Building and the first and second floors of that building would continue to be used by the Infirmary. Space now occupied by the Infirmary in the Massachusetts General's Clinics Building would revert to the General Hospital for some much needed expansion of the Massachusetts General's Clinics.

Financially, the Massachusetts Eye and Ear Infirmary enjoyed an excellent year. The total cost of operating the Infirmary rose to a new high of $5,000,000. in this fiscal year. However, the over-all financial situation of the hospital actually improved during the year. The hospital net operating loss in 1967 was $125,619. compared to $281,802. in 1966. During the year 1967, free service of $181,903. was given to our patients. Due to Medicare and Medicaid our free service and allowances to patients was decreased this year by $60,000. The Pension Plan for our employees now has a reserve of a million dollars to take care of future pensioners.

I am sure this report would not be complete without mentioning Medicare. Probably the most interesting aspect of this program is that it did not require a profound change in the Infirmary from a managerial point of view. However, some clinical ramifications have to be watched very carefully so that we can assure our House Officers of receiving the best training possible.

Our Patients Accounts Department employed one extra person to handle Medicare claims but has subsequently been able to go back to its original staff. We originally had a backlog of some 60 or 70 claims, but are now operating smoothly with current Medicare billings. About 25% of our patients continue to be over 65 years of age and the average of length of stay of our Medicare patients is down to 6.5 days from 6.9 before Medicare. This represents a drop of almost a half day while nationally the experience has been that the average stay of patients 65 or over has increased about two days. Again, I believe this is a tribute to the work of our Utilization Committee particularly and to the entire Medical Staff in general. Clinically, however, we had a decrease in the number of patients presenting themselves for surgery as hospital or Service patients. We are trying to adjust as rapidly as possible and are aware of the continuing need of evaluating our Residency Program.

I should like to close on a note of optimism about the future. I believe the new building program has such force behind it that it will go forward despite obstacles both foreseen and unforeseen. At the moment, the ingredients are present. These ingredients are: 1) the needs of the patients and the medical staff who treat them; 2) the awareness of these needs by our Trustees and, of course 3) the dedication of us all to create a facility for patient care, research, and teaching which is worthy of the international reputation that is enjoyed by the Massachusetts Eye and Ear Infirmary.

CHARLES T. WOOD
Director

COMPARATIVE STATISTICAL HIGHLIGHTS

IN-PATIENT HOSPITAL (178 BEDS)

	1967	1966
Admissions:		
Eye Patients	6,120	5,683
E.N.T. Patients	4,892	4,651
Total Admissions	11,012	10,334
Operations:		
By Eye House Staff	1,559	1,588
By Eye Attending Staff	4,944	4,395
Total Eye Operations	6,503	5,983
By E.N.T. House Staff	1,202	1,249
By E.N.T. Attending Staff	3,342	3,154
Total E.N.T. Operations	4,544	4,403
Total Operations	11,047	10,386
Discharges:	11,033	10,345
Deaths	12	15
Autopsies	58%	40%
Patient Days	56,702	55,215
Av. Patient Census	155	151
Av. Length of Stay	5.17 days	5.33 days
Bed Utilization	87%	84%
Av. Patient Cost per day	$62.06	$56.21

OUT-PATIENT DEPARTMENT

	1967	1966
Eye Clinic:		
New Patients	4,868	4,676
Revisits	48,472	47,249
Total Eye Visits	53,340	51,925
E.N.T. Clinic:		
New Patients	2,377	2,863
Revisits	18,856	15,394
Total E.N.T. Visits	21,233	18,257
Total New Patients	7,245	7,539
Total Revisits	67,328	62,643
Total O.P.D. Visits	74,573	70,182

EMERGENCY WARD

Eye Cases	10,300	8,849
E.N.T. Cases	7,211	5,921
Total (1)	17,511	14,770

Note (1). Of these, 269 were admitted to the hospital in 1967 and 285 in 1966.

DEPARTMENT OF OPHTHALMOLOGY

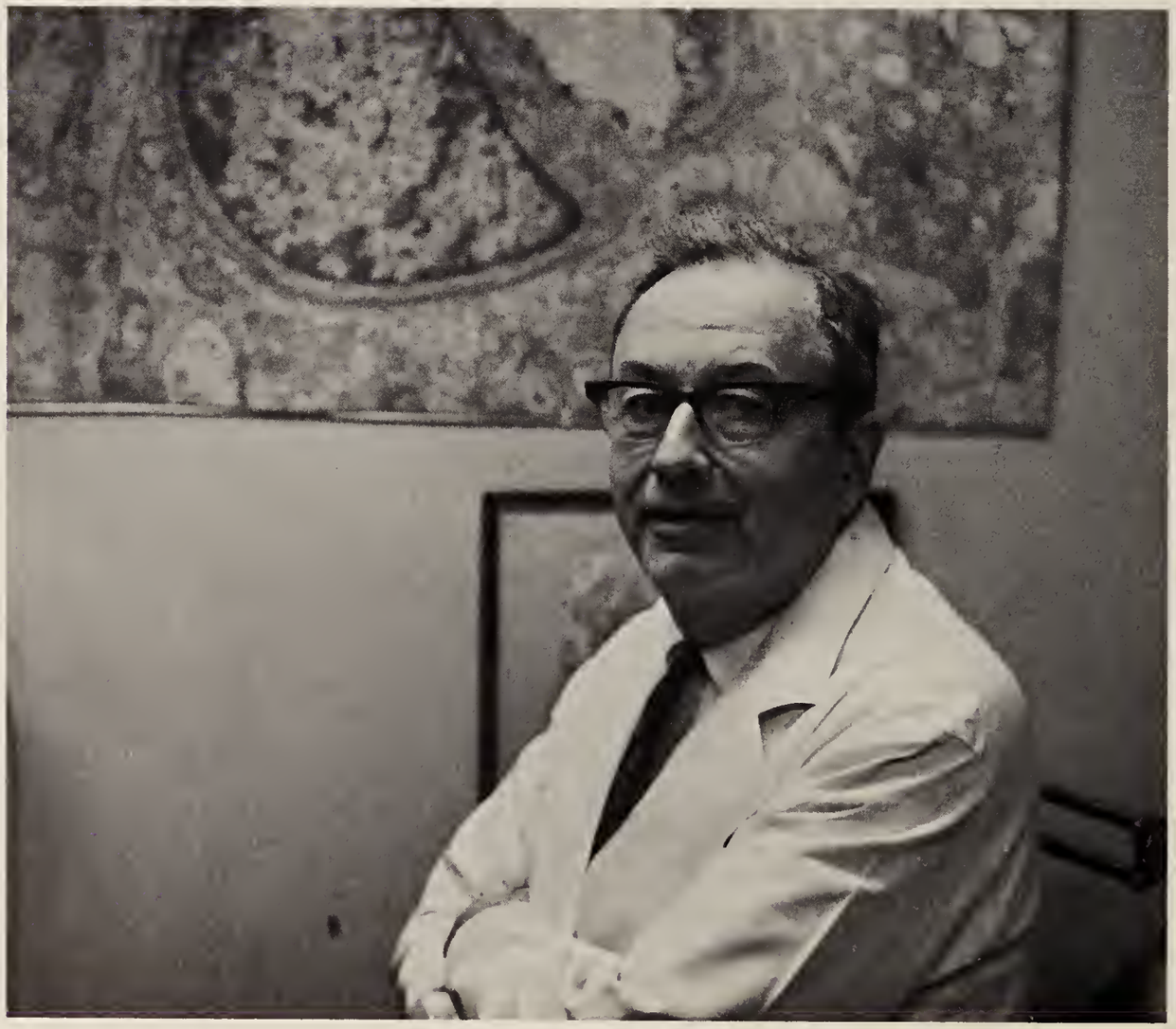
The year just concluded began with great anticipation at the prospect of a new hospital. The hope of eventual relief from our extreme overcrowding in patient and research facilities made our present severe limitations more bearable. The year ended with an architectural prospectus which, if adopted, will make it possible to double or triple our present space.

Patient Care and Research

The Eye Clinic continues to be the largest clinic, by far, of the Massachusetts General Hospital-Infirmary complex with over 50,000 patient-visits being listed for the past year. This amounts to more than one quarter of all ambulatory patients coming to the two hospitals. The number of patients admitted to the hospital from the Eye Clinic was 1,511 and the number of eye operations 1,559. Approximately three times as many private patients were admitted by the attending staff in the same period.

Since cataracts and glaucoma, which comprise the majority of admissions, are predominantly diseases of older people it is not surprising that one quarter of the admissions were Medicare patients. Some others were Medicaid patients but the actual number is meaningless since this program was begun late in the fiscal year.

While no distinction is made in practice between laboratory and clinical research, budg-



David G. Cogan, M.D.
Chief of Ophthalmology

etary and historical considerations have set a precedent for the predominantly laboratory research to be conducted under the aegis of the Howe Laboratory while the predominantly clinical research comes under the aegis of the Infirmary. The activities of the former, described in some detail in the annual Howe Laboratory Report, include the following variety of investigations: studies on the ultrastructure and function of the fetal retina, exploration of iodoacetate poisoning as an experimental model for retinitis pigmentosa, fluorescein angiography of the retinal vessels, immunology of the intraocular fluids for toxoplasma, development of new photographic techniques for the recording of ophthalmic disease, design of a cryoprobe for cataract surgery, and the development of electronic means for measuring the conduction times and the amplitudes of visual impulses in the nervous system.

The predominantly clinical research, generously supported by the National Institute of Neurological Diseases and Blindness under a contract referred to locally as the Center Grant, is executed chiefly through the subspecialty departments. As this Center Grant goes into its third year of operation we might well remind others and ourselves of its initial aim. The intent of the Center Grant is to provide facilities and support for clinical research comparable to that which has been available for basic research these past several decades in the Howe Laboratory. The operations of the Center Grant have been handicapped by the lack of space but we can report solid progress in all areas of its categorical subdivisions.

In glaucoma, studies on progestational hormones (oral contraceptives) have shown a lowering of intraocular pressure by the drugs. The mechanism of this action and its possible therapeutic value are currently being tested. Similarly the effect of aspirin and of various diuretic agents on the intraocular pressure are being tested. The deleterious effect of new blood vessel formation in the angle of the anterior chamber is being investigated along with methods aimed at by-passing the severe glaucoma which results.

Clinical corneal research has been especially high-lighted by the development of an "artificial endothelium" for corneal transplants. This has great promise, especially for eyes with advanced bullous keratopathy which would otherwise be unsuitable for keratoplasty. Related studies have shown the feasibility of "machining" corneal transplants, the special uses of scleral contact lenses, the relationship of corneal vascularization to stromal swelling, and the demonstration of living spirochetes in the anterior chamber of patients with ocular syphilis.

A prime activity of neuro-ophthalmic research this past year was in the field of retinal angiography. A fluorescent dye is injected into an arm vein and its transit into the eye recorded by serial photographs. This technique, which is being developed in many clinics, is an invaluable aid to the study of circulatory disturbances in the back of the eye. Another active area of neuro-ophthalmology is the measuring of delay times in retinal and occipital responses after exposing the eye to flashes of light.

In the division of Retina Research, progress was made in a surgical approach to operations performed on the vitreous: a new cryoprobe was designed for use inside the vitreous and techniques were developed for operating with new types of forceps and scissors inside the vitreous cavity. A new absorbable material is proving extremely useful in selected cases of retinal detachment. Improved management in cases of retinal detachment with giant retinal breaks brought the rate of success to 50% in these formerly desperate cases. New approaches to the study of retinal sensitivity may prove useful in making an earlier diagnosis of retinal detachment.

In the field of infectious disease the perennial search for the causative agents of uveitis goes on. Numerous viral cultures and immunologic studies have been done on selected cases but the results have been as frustrating for us as they have been for other investigators. This is possibly the darkest area in clinical ophthalmology and the most elusive to clarify.

In all these projects, and others which we cannot mention in this brief account, the Center Grant supports not only the specific research but also the core facilities on which most of them and much of the Howe Laboratory depend. This includes medical photography, machine shop assistance, and medical records. We feel fortunate indeed for this important research support.

Teaching and Training

The ophthalmic staff has deep involvement in teaching and training at many levels of sophistication. Small groups of medical students are daily present in the Eye Clinic. Stereophotographs of an especially interesting case are put on display each week. Postgraduate students up to a limit of 35 attend a four month didactic and laboratory course in the basic sciences of ophthalmology each year. Twenty residents are constantly in service at the Infirmary. A six weeks' rotation through the Children's Hospital Service has just been added to the residents' curriculum.

The Ophthalmic Assistants Program warrants special description because of its newsworthiness and because of its experimental nature. The program was begun two years ago as a modest attempt to do something about the doctor shortage through training paramedical personnel. Ophthalmologists are in short supply, even in urban areas, and the

simple turning out of more doctors does not seem to be practicable. Indeed, Medicare, Medicaid, and other third party agencies have, whatever their merits, caused such a relative drop-off in surgical cases available for hospital training that many doctor-training programs, including ours, must consider decreasing the number of residents at a time when we most urgently need to increase them.

One alternative for the shortage is to train ophthalmic assistants who might do many of the time-consuming, technical procedures and yet work with ophthalmologists to ensure adequate medical supervision of the patient. This year we are sufficiently far along on our program so that we can give a more detailed account of its activities than has seemed wise previously. The first trainee began three years ago. Four are now enrolled. If room were available we could train many more. The trainees spend two years as an apprentice with basic instruction in tonometry, tonography, refraction, contact lens fitting, maintenance of equipment, care of pathology specimens, and familiarity with general hospital procedures. A series of programmed courses have been developed for just this purpose and arrangements are being made to rotate the trainees through the Eye Department of the Children's Hospital and in private doctors' offices. But most significantly these trainees are learning in a hospital environment along side resident doctors-in-training so that the two will learn how best to coordinate their functions for future collaboration.

A similar experiment is, of course, being tried in other centers. None of us know how successful it will be in answering the doctor shortage but a pattern may be set that will have a significant effect in an area where experimentation is needed more than debate. We have had trouble in funding it but Seeing Eye, Inc. has just graciously agreed to underwrite the expenses for one year. We are also encouraged by the fact that we have more than enough applications from qualified candidates to ensure a high level of trainees.

The Howe Library and the Vision Information Center

The Howe Library has long served the literature needs of the local medical and scientific community. A more ambitious venture has been the recent establishment of a national Vision Information Center operated conjointly by the Howe Laboratory and the Countway Library of the Harvard Medical School. Temporarily housed in nearby quarters, the Center will be eventually moved to the Infirmary when space becomes available. Financed by the National Institute of Neurological Diseases and Blindness it aims to set up a network serving the ophthalmic needs for literature retrieval and possibly a measure of literature analysis.

At present a thesaurus is being prepared concomitantly with data input. The thesaurus will permit easy interrogation of a computer and recovery of stored information. The current literature is being coded simultaneously by a group of consultants and by professional indexers to assure the adequacy of input. Several programmed courses have been prepared and put "on-line" covering refraction, ocular motility, and basic ophthalmology. Consoles (computer-connected typewriters) have been set up at the Center as prototypes of what may eventually be a national hook-up for libraries, hospitals, and other organizations having a need for literature retrieval and data accumulation in the field of vision.

Special Events and Honors

Several events of particular interest may be included in a report of the year's activities. One was the joint meeting by many of the Infirmary's staff and other members of the New England Ophthalmological Society with the Irish Ophthalmological Society in Dublin. This was a gala scientific-social event commemorating the 50th year of the latter society and serving as a return of that society's visit to us two years ago. A similar joint meeting of international groups took place in September at the Infirmary when we played host for a

two day visit of approximately 30 members from the French Ophthalmological Society. The high point of this visit was an all morning clinical conference with a bilingual discussion of cases and problems of mutual interest.

The Viet Nam war is touching the lives of all of us but few have had the intimate contact experienced by some of our residents or recent graduates who have been close to the fighting. One graduate whose letter has just been received writes from a front line bivouac that "The months I spent at the Infirmary as a resident, fellow, and junior staff member were the most pleasant and satisfying of my life." Also noteworthy was the stint of two of our staff who served for two months in the "Volunteer Physicians for Viet Nam" in a civilian hospital in the Mekong Delta. An eye clinic was established in a 250 bed, formerly French hospital, and while one member of the duo team operated in surgery the other would see as many as 80 patients daily in the ambulatory clinic.

Several honors which we would like to acknowledge have come to the Infirmary's staff this past year. Dr. Henry F. Allen was awarded the Howe Medal of the AMA's Section on Ophthalmology for his outstanding contributions to ophthalmology. Dr. Claes Dohlman received the New England Ophthalmological Society Award. Drs. Virgil Casten and Robert Brockhurst received merit awards for their teaching at the American Academy of Ophthalmology and Otolaryngology. Dr. Jin Kinoshita was given an honorary Doctor of Science degree by his alma mater, Bard College. Dr. David Miller won the Second Prize at the Contact Lens Congress for his study on glare sensitivity and epithelial edema in contact lens wearers. Dr. Paul Chandler was Vice President of the Academy and gave its annual Edward Jackson Memorial Lecture on the surgery of congenital cataracts. Dr. Cogan gave the De-Schweinitz Lecture in Philadelphia and was the Invited Guest of the European Ophthalmic Pathology Society and Guest Speaker of the Netherlands Ophthalmological Society. I would also like to mention the attainment of Surgeon Emeritus status this past year for Dr. Mahlon Easton who, like his father, served the Infirmary well and faithfully over many years.

Perspective

The urgent issue at the time of our previous report was the consolidation of plans for a new building. The space problem had become so acute that we were unable to accommodate the minimum requirements for patient care, teaching, and research. The severe space restrictions still apply but the plans for a new hospital are now sufficiently advanced that we may give attention to other pressing problems.

Most important is the reorganization of our services in line with the vastly different socioeconomic and educational conditions which are now taking place. The Infirmary was begun as an eye hospital for the care of the indigent. It has been traditionally staffed by visiting doctors who contributed their tithe of service voluntarily and by residents who spent several years of their lives in return for the training offered. But now the growth of welfare support, especially under the aegis of Medicare and Medicaid, is reducing the needs of the indigent and changing the emphasis of the hospital's mission. The resident staff is being paid a livable, if modest, salary. Our visiting staff is loyally carrying on the tradition of volunteer service but cannot be expected to give the time necessary for running the subspecialty clinics and Fellowship programs.

The present problem, then, is a continual reappraisal of our role in a changing society and the institution of new activities which will maintain the benefits of the past while adapting to the needs of the future. The present report records some of these attempts which have been made the past year toward this end.

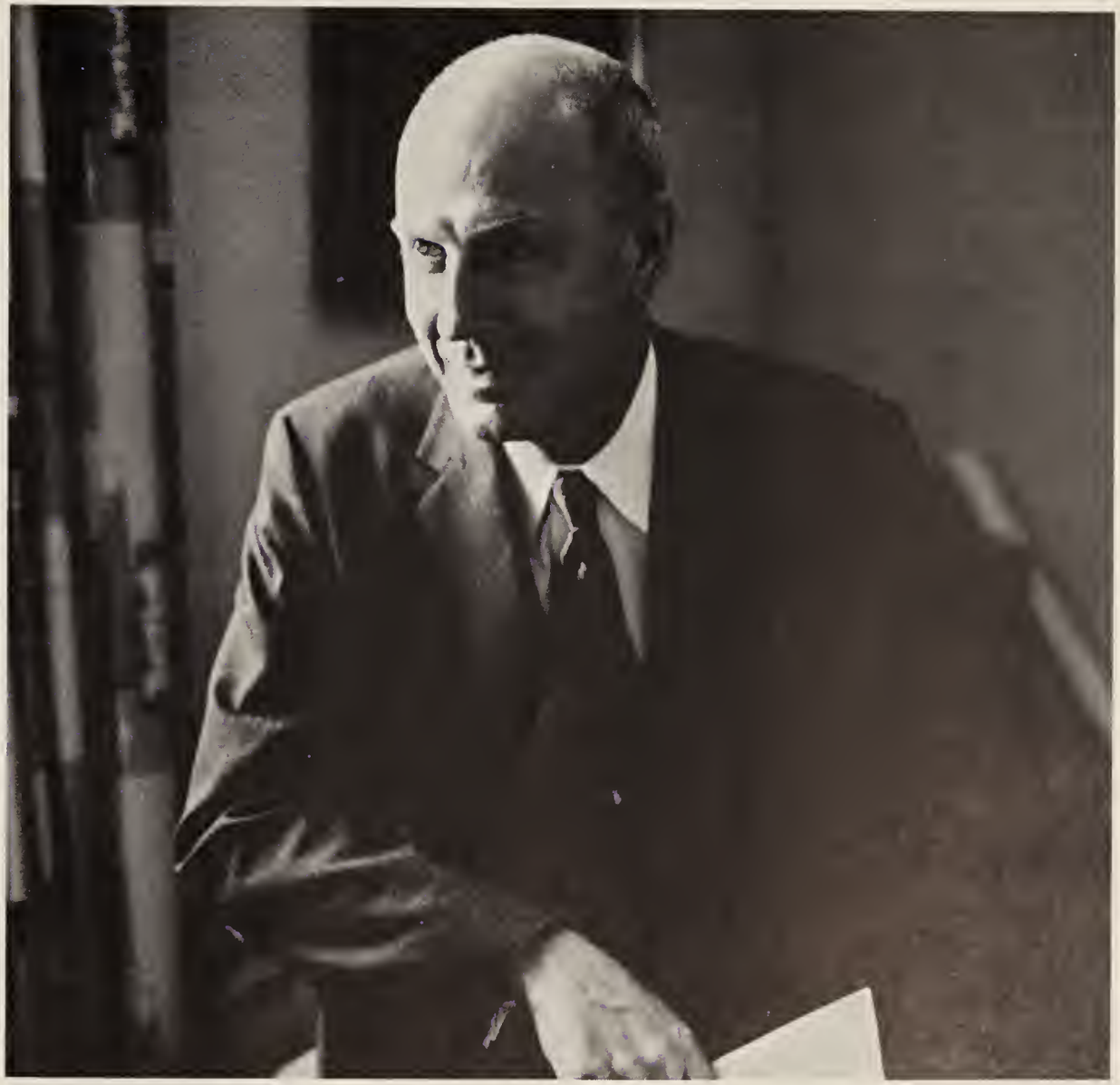
David G. Cogan, M.D.
Chief of Ophthalmology

DEPARTMENT OF OTOLARYNGOLOGY

The medical staff of the Department of Otolaryngology numbers sixty-one of which six are associated full-time and fifty-five are associated part-time with the Infirmary. There are, in addition, seventeen residents (house officers in training). During the past year (October 1, 1966 to September 30, 1967) the staff has cared for 21,233 outpatients. The inpatient census was 4,892, of which 3,562 were private and 1,330 were service cases. Surgical procedures were performed on over 90% of these patients. Listed among the surgical procedures were 1,437 major ear operations of which 804 were stapedectomies for otosclerosis, 80 laryngectomies, 72 radical neck dissections, 129 plastic reconstructive operations and six removals of acoustic neurinomas by the translabyrinthine route. These data reflect the high quality of professional skill of the attending staff and the training experience which is available to the residency staff.

An outpatient surgical suite equipped for general anesthesia, available for minor procedures on both private and service cases, has been functioning for nine months and has cared for about 800 patients. Other statistics for the year which reflect the activities of the department are that 218 patients entered the esophageal voice classes; 6,159 patients were tested in the audiology department; 12,553 patients were cared for in the diagnostic radiology department and 1,796 tissue specimens were prepared and studied in the pathology department.

These data show an increase in all depart-



Harold F. Schuknecht, M.D.
Chief of Otolaryngology

ments. With this work load, many departments are functioning at less than peak efficiency because of space limitations. This coupled with the fact that many patients must wait for months for elective surgery points up the need for an enlarged medical facility.

Patients with difficult or unusual problems are usually cared for under one of the special services which is directed by a staff physician with exceptional interest and skill in the particular area. These are the plastic, endoscopy, tumor, and tympanoplasty services. The members of these services pool their knowledge and skill to provide the best possible care for the patient.

Every effort is made to provide for the patient the advantages of new technological and procedural discoveries. Some of these are cardiac monitoring during surgical procedures, resuscitation equipment at strategic locations in the hospital, cryosurgery for extensive or difficult tumor removals, high ultrasound equipment for certain ear problems, microchemical analysis of ear fluid for difficult diagnostic problems, electrical recording (nystagmography) for evaluation of the dizzy patient, radiographic contrast studies for the detection of acoustic tumors and many more. The explosion in medical technology is providing increasingly better care for the patient but also is responsible for increasing medical costs and the need for space in which to perform these functions. If the department is to maintain leadership in the field of otolaryngology, it must grow.

Training in Otolaryngology

A teaching hospital has the serious responsibility of training young physicians, both graduates and undergraduates, to appropriate levels of knowledge and technical skill and to do so without compromising the care of the patient, interfering with the efficiency of the hospital, or unduly encumbering the staff. At the Infirmary, as in most teaching hospitals, the trainees (residents and students) have enhanced patient care, acted as a stimulus to the staff, and provided an academic atmosphere which has promoted good medicine.

At the undergraduate level, the training in a subspecialty, such as otolaryngology, is minimal, but adequate to provide for the non-otolaryngologist an awareness of disease processes in this area. Those students who have a special interest in otolaryngology may elect special courses in otology, laryngology, and research.

Over 90% of the residents who complete training in otolaryngology at the Infirmary hold appointments at teaching hospitals, many have high academic appointments and some are engaged in research programs. The training of teachers and investigators is the responsibility of an academic institution such as ours.

The training program in otolaryngology at the Massachusetts Eye and Ear Infirmary is structured to provide an intense clinical experience under competent supervision while offering an opportunity for the able and motivated trainee to gain also a research experience. While clinical training necessarily has first priority on time, the program is organized so that the trainee has some free hours during each week. If he is motivated to do research, he is counselled, assigned a project by mutual agreement, and supervised carefully by a competent member of the full-time clinical and research staff. Every effort is made to insure that the research work is not at a naive level but at the frontier of knowledge in that particular area of investigation. Rich communication between the research staff and the trainee, as well as frequent conferences and lectures, provide a stimulus for the trainee and sharpen his judgment concerning the quality of his own work and that of others. By these frequent contacts with research minded staff personnel, the trainee acquires a better sense of evaluating scientific evidence. He begins to appreciate more fully the need for statistical studies, controlled experiments, and tests for validity. He brings these concepts to his clinical work and teaching. He becomes a more rational physician and teacher; and, furthermore, he may perform clinical or basic research or make observations that will add to our knowledge of disease and its management.

Research

The Eaton-Peabody Laboratory of Auditory Physiology, operated jointly with the Massachusetts Institute of Technology, concentrates on electrophysiological studies of the auditory system. Since its inception half a dozen graduate students from M.I.T. have completed doc-

toral dissertations based on work done in this laboratory. More recently there has been increasing interaction with Harvard Medical School. It is hoped that such a blending of many disciplines will continue to generate significant research.

The effect of virus infections on the behavior of small vessels is the main subject of interest in the Microcirculatory Laboratory. In anatomy research there are investigations on the afferent and efferent innervation of the vestibular sense organs, the neural connections of the cochlear nuclei and the ultramicroscopic anatomy of the inner ear.

Techniques for repositioning the paralyzed vocal cord and the growth patterns for laryngeal carcinoma are subjects of interest in the laryngology laboratory.

In Otoneurology, the research emphasis is on developing tests for the more precise localization of lesions in the auditory and vestibular systems. In the field of pathology, there are investigations on the changes in the inner ear in various disease conditions, the effect of toxic drugs on the inner ear, and the enzyme patterns of the inner ear in health and disease.

A better impression concerning the scope of the investigative effort of the department can be acquired by examining the list of publications appearing elsewhere in this report.

In the department, there is the equivalent of seventeen full-time investigators and twenty-four engineers, laboratory assistants, and technicians. The annual research budget for the department for 1966-67 was about $500,000.

The prevention and treatment of disease depends ultimately on knowledge gained through research. One of the responsibilities of the Infirmary is to seek such knowledge. The generous support of the public — both directly and through governmental agencies — has enabled us to maintain our efforts in supporting research. Our most immediate and pressing need is to increase the working space for many of the more promising areas of research.

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Chief of Otolaryngology

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Fumihisa Hiraide, M.D.

MEDICAL STAFF

Common to Both Services

Director of Anesthesiology

JOHN C. SNOW, M.D.

Assistant Anesthesiologists

ALICE H. PARSONS, M.D.
JAVAD SHAMSAI, M.D.
LEO T. KELLY, M.D.
THOMAS J. KEENAN, M.D.

Fellows in Anesthesiology

FERNANDO VIDAL MD
RONALDO MACHADO, M.D.
DOGAN INANC, M.D.
CAMILO MARTINEZ MD
ERHAN ERDEM, M.D.
MEHMET DUYMAZLAR, M.D.
ROMULO E. SILVA, M.D.
CAMILO VIDAL, M.D.

Director of Radiology

ALEXANDER S. MACMILLAN, JR., M.D.

Senior Consulting Roentgenologist

ALEXANDER S. MACMILLAN, M.D.

Microbiologist

ANITA MANGIARACINE, A.B.

The members of the medical staff of the Massachusetts General Hospital are consultants to the Infirmary, and in this capacity become a part of the staff of the Massachusetts Eye and Ear Infirmary.

IN MEMORIAM

PHILIP E. MELTZER, M.D. March 17, 1895 – March 7, 1967

1919 – Resident in Otolaryngology
1919 – Clinical Assistant in Otolaryngology
1924 – Assistant Surgeon in Otolaryngology
1927 – Associate Surgeon in Otolaryngology
1935 – Surgeon in Otolaryngology
1946 – Surgeon in Charge of the Service for the Deaf
1960 – Chief of Otolaryngology
1961 – Senior Consulting Surgeon in Otolaryngology
1964 – Consulting Chief of Otolaryngology

BOSTON EYE BANK

Serving New England

General Director

S. ARTHUR BORUCHOFF, M.D.

Executive Secretary

MRS. SUSAN S. ALLEN

Executive Committee

DAVID G. COGAN, M.D.
MRS. RICHARD CARY CURTIS
CLAES H. DOHLMAN, M.D.
WESTON HOWLAND, JR.
BRENDAN D. LEAHEY, M.D.
HENRY HIXON MEYER
MRS. WILLIAM A. SLADE, JR.

R P B
RESEARCH TO PREVENT BLINDNESS
TRUSTEES AWARD
for Outstanding Ophthalmic Achievement
presented to
CHARLES L. SCHEPENS, M.D.
in recognition of his extraordinary contributions to the
Science of Ophthalmology which have vastly increased man's knowledge
of the visual processes, given important impetus to the progress of
eye research, and directly influenced the course of ophthalmic
science in its service to those afflicted with blinding diseases.
November 21, 1967

The Infirmary is honored that Charles L. Schepens, M.D., Director of the Retina Service, was named a recipient of the 1967 Award for Outstanding Ophthalmic Achievement presented by the Board of Trustees of Research to Prevent Blindness, Inc. Dr. Schepens shared the Award with Prof. Dr. Gerd Meyer-Schwickerath, Director of the University Eye Clinic, Essen, Germany.

The Award consists of an honorarium of $25,000 and a citation given "for outstanding achievement in medical research which contributes directly to the preservation or restoration of sight, or which provides fundamental knowledge, understanding, techniques or concepts which prove essential to the prevention, cure or control of visual afflictions."

In announcing the Award, the RPB Trustees said: "The winners of the 1967 RPB Trustees Award have been chosen as the result of full deliberation by a committee of ophthalmic scientists, by RPB's eminent Scientific Advisory Panel, and finally by the Board of Trustees. In selecting Dr. Charles L. Schepens and Prof. Dr. Gerd Meyer-Schwickerath to share the 1967 award, the judges have acknowledged the extraordinary contributions made by both these men to the cure of retinal diseases. The results of their work already are being widely applied effectively in the saving of sight."

In addition to his work with The Massachusetts Eye and Ear Infirmary, Dr. Schepens is the founder of The Retina Foundation and is Director of its Department of Retina Research. He also is a Clinical Associate in Ophthalmology of The Harvard Medical School.

FORM OF BEQUEST

I give to the Massachusetts Eye and Ear Infirmary, a charitable corporation organized under the laws of Massachusetts, and situated at Boston, Massachusetts, ... Dollars.

MASSACHUSETTS EYE & EAR INFIRMARY ANNUAL REPORT 1968

PREFACE

Patients at the Massachusetts Eye and Ear Infirmary have special problems that have to be dealt with in special ways. Many of these patients have a temporary loss of the use of a vital sense — an unsettling experience in itself, and one for which the need to be admitted to the unfamiliar hospital environment may be additionally disquieting.

Those of us who work in the setting from day to day learn to help the patient who needs it. When hospital personnel enter the room of a blind patient they immediately speak and let the patient know why they are there — whether it be to take a temperature, make an examination or dust the window sill. For the patient who has no hearing they make certain he sees them so he won't be startled. And the voiceless patient has a slate by his bedside so he can communicate.

Our 1968 annual report reflects the services performed for all of these patients throughout the year.

Since its founding in 1824 as a free clinic for the treatment of the eye, the Massachusetts Eye and Ear Infirmary has become a world center for treatment of diseases of the eye, ear, nose and throat. An independent non-profit, private institution, the Massachusetts Eye and Ear Infirmary is a Harvard Medical School affiliated teaching hospital and provides all training in ophthalmology and otolaryngology for Harvard Medical School students.

Its research has significantly advanced medical knowledge within the specialties it serves and many areas of the United States and foreign countries are served by graduates of its highly specialized training programs.

Charles T. Wood
Director

BOARD OF MANAGERS

Henry Hixon Meyer, *Chairman*
William H. Claflin, III, *President*
Horace W. Frost, *Treasurer*
George M. Lovejoy, Jr., *Secretary*

*Fred A. Baumeister
Melville Chapin
Frank S. Christian
Mrs. Richard Cary Curtis
William A. Parker
Henry K. Porter
*John Ryan
James I. Summers
Walter H. Trumbull
Frederic Winthrop

*Appointed by the Commonwealth

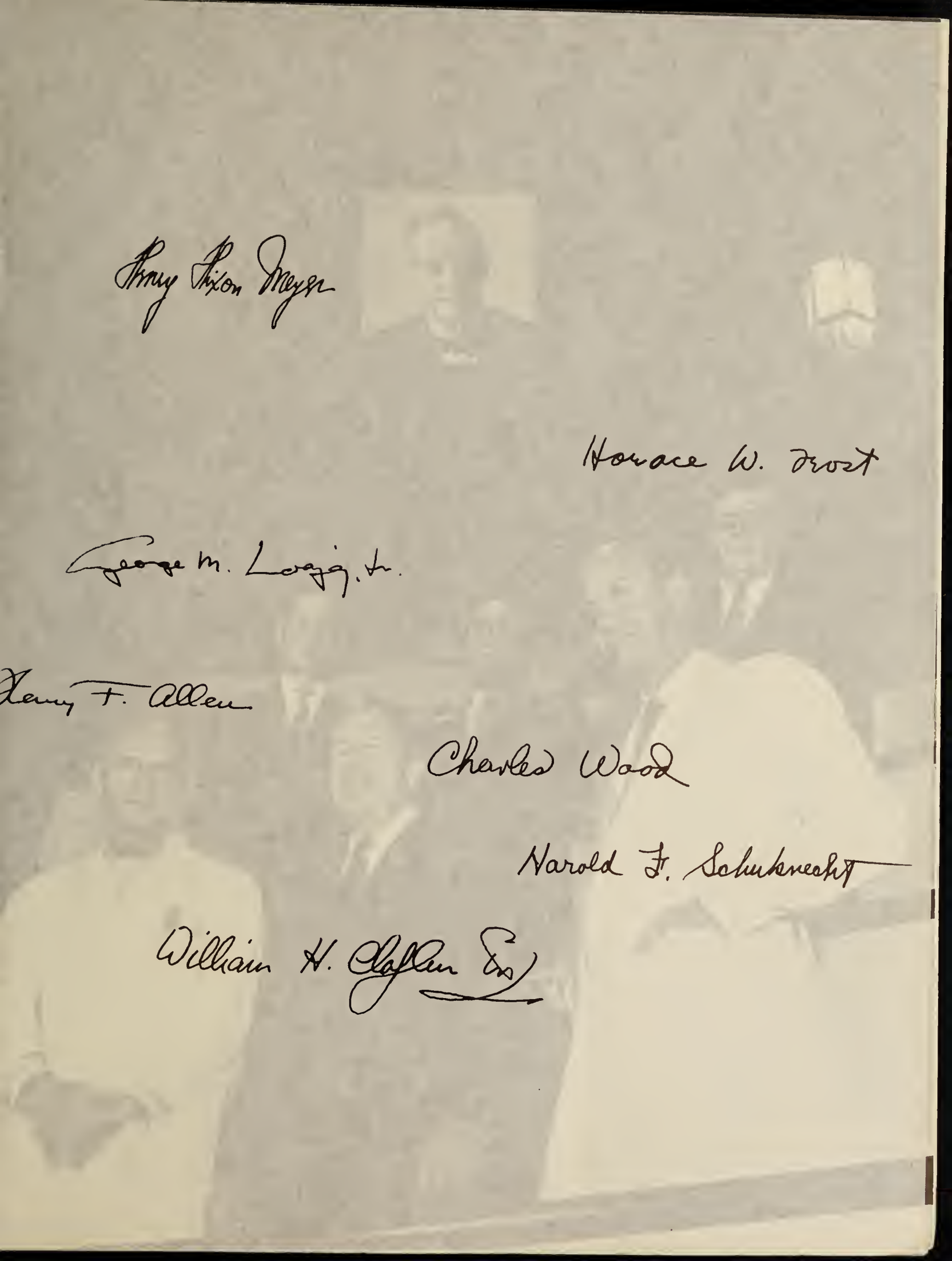
TRUSTEES

(Dates indicate year of appointment)

Hon. Leverett Saltonstall	1925
Walter H. Trumbull	1929
Robert F. Bradford	1934
William A. Parker	1935
Henry Hixon Meyer	1937
Mrs. Richard Cary Curtis	1940
Horace W. Frost	1940
Hon. Edmund V. Keville	1942
Frederic Winthrop	1943
Mrs. Sullivan A. Sargent	1945
William H. Claflin, III	1947
Mrs. John W. Farley	1948
The Rev. Robert G. Metters	1948
August R. Meyer	1948
Miss Amelia Peabody	1948
Nathaniel Faxon, M.D.	1949
Francis W. Hatch, Jr.	1951
George L. Pew	1951
Howland S. Warren	1951
Melville Chapin	1951
Henry K. Porter	1951
George A. McLaughlin	1952
Mrs. Francis T. Hunter	1953
Mrs. Varaztad H. Kazanjian	1953
Richard P. Chapman	1955
William Ehrlich	1955
Richard Harte	1955
Weston Howland, Jr.	1955
William L. Saltonstall	1957
Leslie Soule	1957
Mrs. Walter C. Dodge	1963
Thomas B. Frost	1963
John S. Howe	1963
Frederick H. Lovejoy	1963
Thomas Allsopp	1963
Frank S. Christian	1965
George M. Lovejoy, Jr.	1965
Mrs. John Lowell	1965
Frederick C. Rozelle, Jr.	1965
George C. Seybolt	1965
Francis S. Hill	1966
Robert Bacon	1966
James I. Summers	1966
Leo F. Daley	1966
Paul A. Chandler, M.D.	1967
Edwin B. Dunphy, M.D.	1967
Mrs. Bartlett Harwood	1967
Henry G. Lapham	1967
John M. Lord	1967
LeRoy A. Schall, M.D.	1967
William F. Spang	1967
John I. Taylor	1967
Monte J. Wallace	1967
Colin McA. Cunningham	1968

Director
Charles T. Wood

Chiefs of Service
Henry F. Allen, M.D., Ophthalmology
Harold F. Schuknecht, M.D., Otolaryngology


Henry Dixon Meyer
Horace W. Frost
George M. Lovejoy, Jr.
Henry F. Allen
Charles Wood
Harold F. Schumacher
William H. Claflin, Esq.

The Primary Service

Surgery is the primary service of the eye, ear, nose and throat specialty hospital. More than 99.8% of the 11,038 patients admitted last year to the Massachusetts Eye and Ear Infirmary underwent operations. And since major eye, ear, nose and throat surgery does not incapacitate the patient's ability to get around for very long as would major abdominal, vascular or neurosurgery, their average stay in the hospital is shorter — 5.23 days as opposed to an average of 9 days at a general teaching hospital.

There were 8,057 eye operations performed last year at the Massachusetts Eye and Ear Infirmary. These ranged from relatively minor procedures in the Emergency Room and outpatient clinics to repair of 1,319 detached retinas, 126 corneal transplants, 2,070 cataract removals, and 4,668 other procedures. A new surgical technique — corneal lens glueing — was developed to serve instead of a corneal transplant in certain instances where no other approach was feasible.

To employ this advanced technique a permanent contact lens is glued to the specially prepared cornea with a surgical adhesive that has also proved effective in sealing corneal perforations and lacerations.

Among the 5,800 ear, nose and throat surgical procedures done at the Infirmary last year, the major ones included 94 removals of the larynx (laryngectomy), 56 of which included radical neck dissections, plus 35 radical neck dissections alone, 132 reconstructions of the middle ear hearing mechanism (tympanoplasty), 641 excisions and subsequent synthetic replacement of the stapes bone (stapedectomy) to correct defective hearing that results from otosclerosis, 45 facial fracture repairs, 118 nose repairs (rhinoplasty), and 206 sinus operations.

A new technique was developed to replace an injured larynx. This procedure is particularly effective in laryngeal injuries that occur in automobile accidents.

Gaining New Knowledge

Scientific investigations by Infirmary researchers are directed toward gaining new basic knowledge that over the years may be translated into better approaches to treatment improving the sight, hearing and speech of many unfortunate people and preventing various eye, ear, nose and throat disorders. Last year combined government and other research grants totaled almost $1,300,000. Such research activities serve another important purpose in addition to the advancement of science — they train young investigators.

Ophthalmology research last year included identification of an enzyme inhibitor to prevent sugar cataracts; intensive evaluation of drugs and surgery to improve the treatment of glaucoma; a study of the degrees of experimental damage to photo receptor cells after exposure to light considered not excessive by modern illuminating standards, and provocative electron microscope explorations of retinal reactions to pulsed low-beam laser doses.

In addition, the Howe Laboratory of Ophthalmology has become a clearing house for evaluating drugs and poisons that affect the eye.

Other studies are related to viral, enzymatic, and blood supply links to little understood disorders of the eye and its glands; identification of pathological changes in microscopic sections of the neuronal cells of the retina and cortical cells of the lens; eye changes in genetic disorders (familial lymphohistiocytosis), collation of approximately 500 angiograms of diverse clinical conditions and an experimental study of the factors responsible for background fluorescence, and organization of the vast anterior segment collection of stereophotographs in color has continued with preparation of Volume II of an Atlas of External Eye Diseases.

Otolaryngology research efforts in 1967-1968 included: study of the usefulnes of cryosurgery (freezing technique) as a treatment for cancer of the neck and head; improved surgical technique to remove tumors of the acoustic nerve (acoustic neurinoma) in addition to development of a diagnostic analysis of inner ear fluid to differentiate acoustic neurinoma from Meniere's Disease; study of the effects of streptomycin on the inner ear; developing techniques to reconstruct the larynx, trachea and esophagus damaged by disease or accident as well as methods to reposition vocal folds of patients with laryngeal paralysis.

The Eaton-Peabody Laboratory of Auditory Physiology, affiliated with Massachusetts Institute of Technology and Harvard Medical School, continues its extensive project begun in 1959 to map the neurophysiological and physical mechanisms involved in hearing.

For the Ambulatory Patient

Today there is a national emphasis on delivery of health care through hospital ambulatory services. Medicare and Medicaid legislation is responsible for much of it. Further, today many people across the country increasingly turn to the hospital emergency ward instead of the family physician, specialist or established specialty clinics. Evidence of this at the Infirmary can be seen in a 91% increase in Emergency Ward visits over the past five years.

The Infirmary's plans for the future reflect awareness of this trend.

Eye Clinics

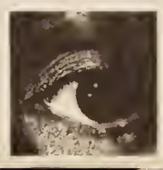
More than 52,000 out-patient eye clinic visits were made last year resulting in 1,666 hospital admissions and 1,629 eye operations.

Specialty eye clinics to which these visits were made include Cornea, Retina, Glaucoma, Sub-Normal Low Vision and Ocular Motility Services.

Eye Emergency service visits totaled 11,354, ranging from removal of a foreign object in the sclera to the treatment of a massive hemorrhage.

Ear, Nose and Throat Clinic

The Ear, Nose and Throat Department last year recorded 22,901 clinic visits. The 8,673 patients seen in the Emergency Room had complaints that required treatment ranging from removal of ear wax to accidental ear injuries. In addition, 1,269 patients were treated in the Outpatient Minor Surgical Suite for such problems as tumors requiring biopsy for diagnosis. And 7,584 hearing tests were given to patients ranging from two-week old babies to people in their nineties. 6,968 of those tests were given to outpatients.

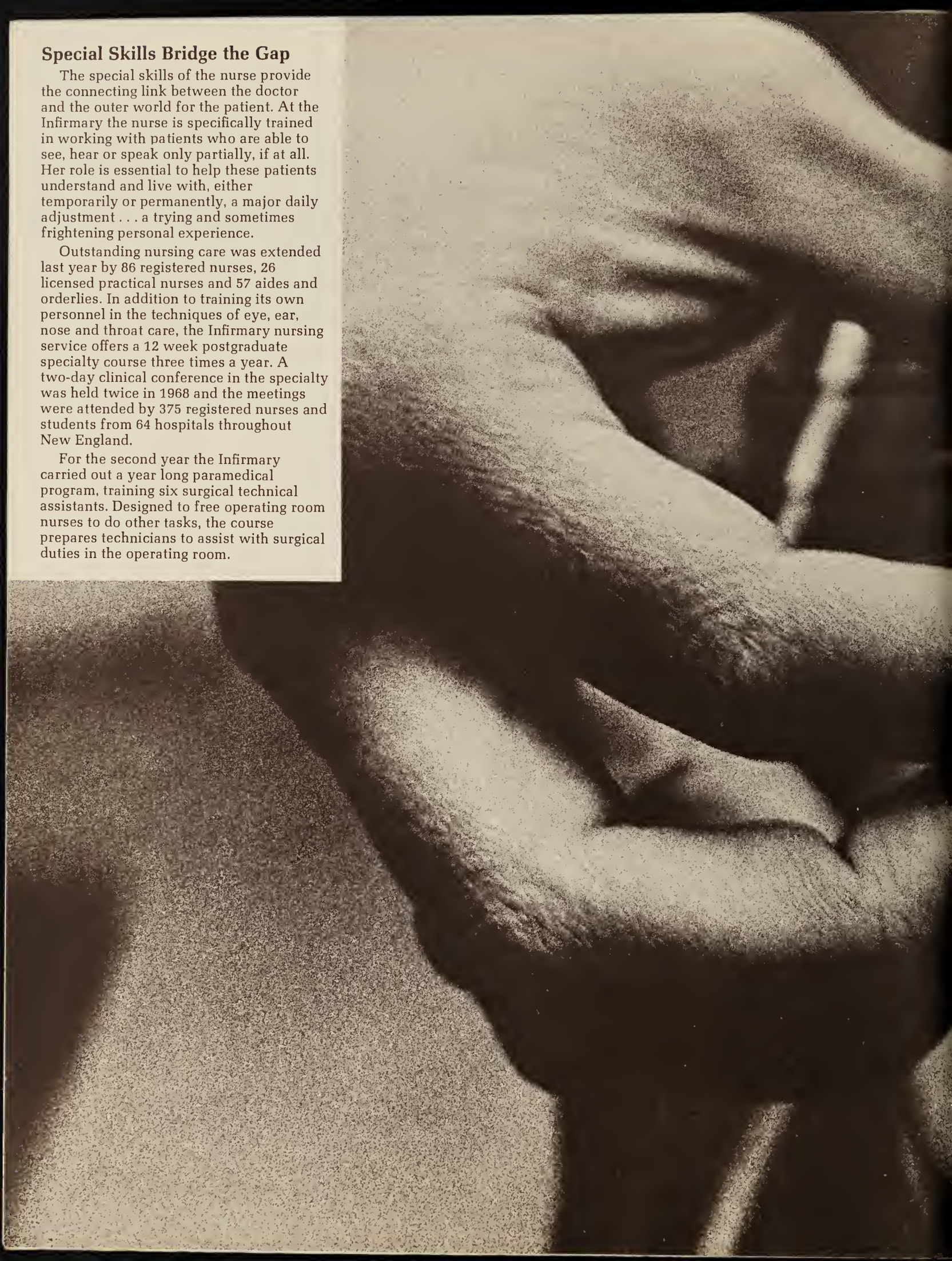


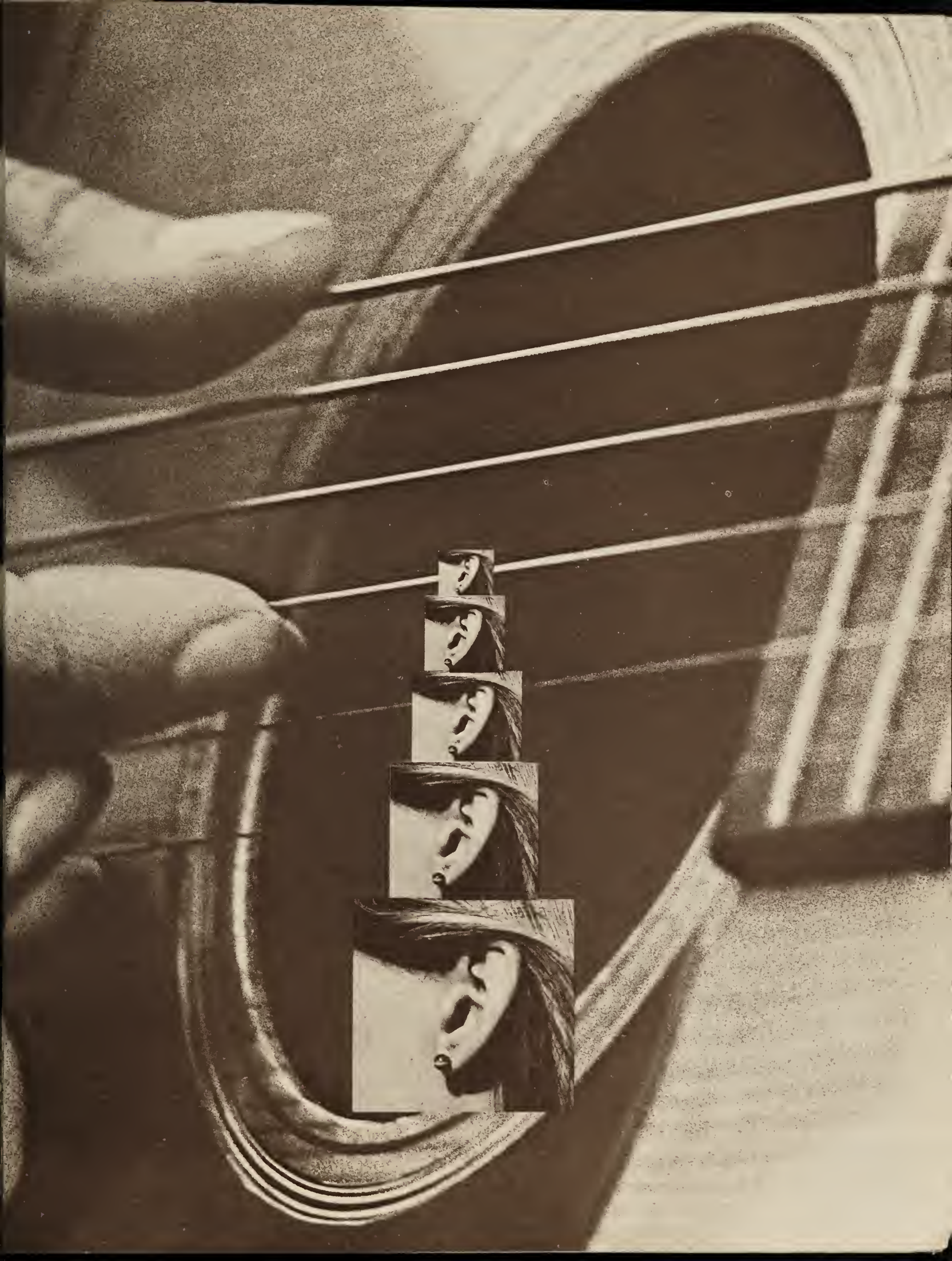
Special Skills Bridge the Gap

The special skills of the nurse provide the connecting link between the doctor and the outer world for the patient. At the Infirmary the nurse is specifically trained in working with patients who are able to see, hear or speak only partially, if at all. Her role is essential to help these patients understand and live with, either temporarily or permanently, a major daily adjustment . . . a trying and sometimes frightening personal experience.

Outstanding nursing care was extended last year by 86 registered nurses, 26 licensed practical nurses and 57 aides and orderlies. In addition to training its own personnel in the techniques of eye, ear, nose and throat care, the Infirmary nursing service offers a 12 week postgraduate specialty course three times a year. A two-day clinical conference in the specialty was held twice in 1968 and the meetings were attended by 375 registered nurses and students from 64 hospitals throughout New England.

For the second year the Infirmary carried out a year long paramedical program, training six surgical technical assistants. Designed to free operating room nurses to do other tasks, the course prepares technicians to assist with surgical duties in the operating room.





Educating the Specialist

In an age of increasing specialization, the Massachusetts Eye and Ear Infirmary seeks to fulfill society's needs by producing experts in the art and science of caring for patients with visual, aural, nasal and laryngeal disorders. Training the specialist — physician, medical student, nurse and/or paramedical personnel — is a major undertaking of the Hospital. And each year, there are 8 courses given to train 570 new specialists.

More than half the yearly nationwide candidates for American Board of Ophthalmology certification are enrolled in two post-graduate courses conducted by the Massachusetts Eye and Ear Infirmary staff — the Harvard Basic Science course and the Lancaster Course.

The Basic Science course with an enrollment of 36 taught by 48 nationwide lecturers is a comprehensive survey of basic sciences and clinical techniques applied in ophthalmology. And the Lancaster Course with 141 summer students is a special 11-week summer course held at Colby College for eye specialists in training across the nation.

More than 30 residents and fellows trained in Ophthalmology at the Infirmary last year in addition to the 140 third and fourth year Harvard Medical students taught during the year.

An intensive, special all-day two-month elective ophthalmology course to teach the 10 most interested fourth year Harvard Medical students was newly instituted last year.

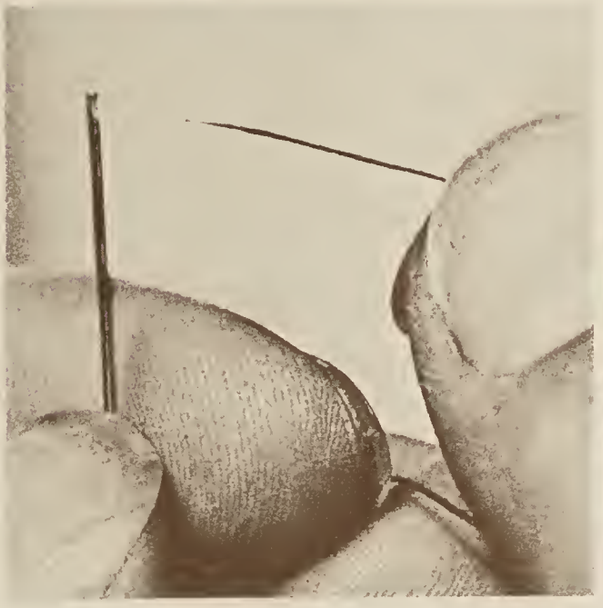
The now four-year old, Ophthalmic Assistants Program had five students in training for two years. This program is designed to relieve the ophthalmologist of many time-consuming technical procedures such as refraction, contact lens fitting, tonometry, tonography and care of pathology specimens.

The annual three-day Retina Service Course was presented to 150 physicians from the United States and abroad.

To educate the laryngectomy patient to speak again is a fundamental aspect of the otolaryngology service. Twenty-four years ago, Mrs. Mary Doehler, a laryngectomy patient, developed the technique and taught herself esophageal speech. She and her assistant, Mrs. Ann Volk, now teach more than 100 new students each year, including those they train to teach the method.

The "voiceless" patients learn to swallow air, store it in the esophagus, force it back into the mouth and then form sounds with lips, teeth and tongue by vibrating the released air against the esophagus.

Education of the otolaryngologist last year included training of 17 residents and teaching 102 Harvard Medical students. In addition the department's three-day post-graduate course is held every three years at the Infirmary for 120 specialists across the country.



To Meet the Growing Needs of the Community . . .

The job to be done to serve some special medical needs of the community grows larger each day and the physical facilities seem to grow smaller by comparison.

For the first time in 70 years the Massachusetts Eye and Ear Infirmary has determined to build a complete new facility that will nearly triple all of the hospital's accommodations. The proposed $23 million structure will be built on the present site of the Infirmary along Charles and Fruit Streets, thereby preserving its historic location. The new building will, in effect, encompass the existing Infirmary and create a totally new hospital above the old. The present hospital will be fully renovated during the final construction stage of the new building.

To overcome problems posed by severely limited land and the need for uninterrupted medical-surgical services plus teaching and research programs, construction will proceed in orderly phases over the next three years.

Highlights of the Year

1. Dr. Henry Freeman Allen was appointed Chief of Ophthalmology in January, 1968 at Massachusetts Eye and Ear Infirmary and Clinical Professor of Ophthalmology at Harvard Medical School. A graduate of Harvard College and Harvard Medical School, Dr. Allen has been on the staff at the Infirmary since 1947.

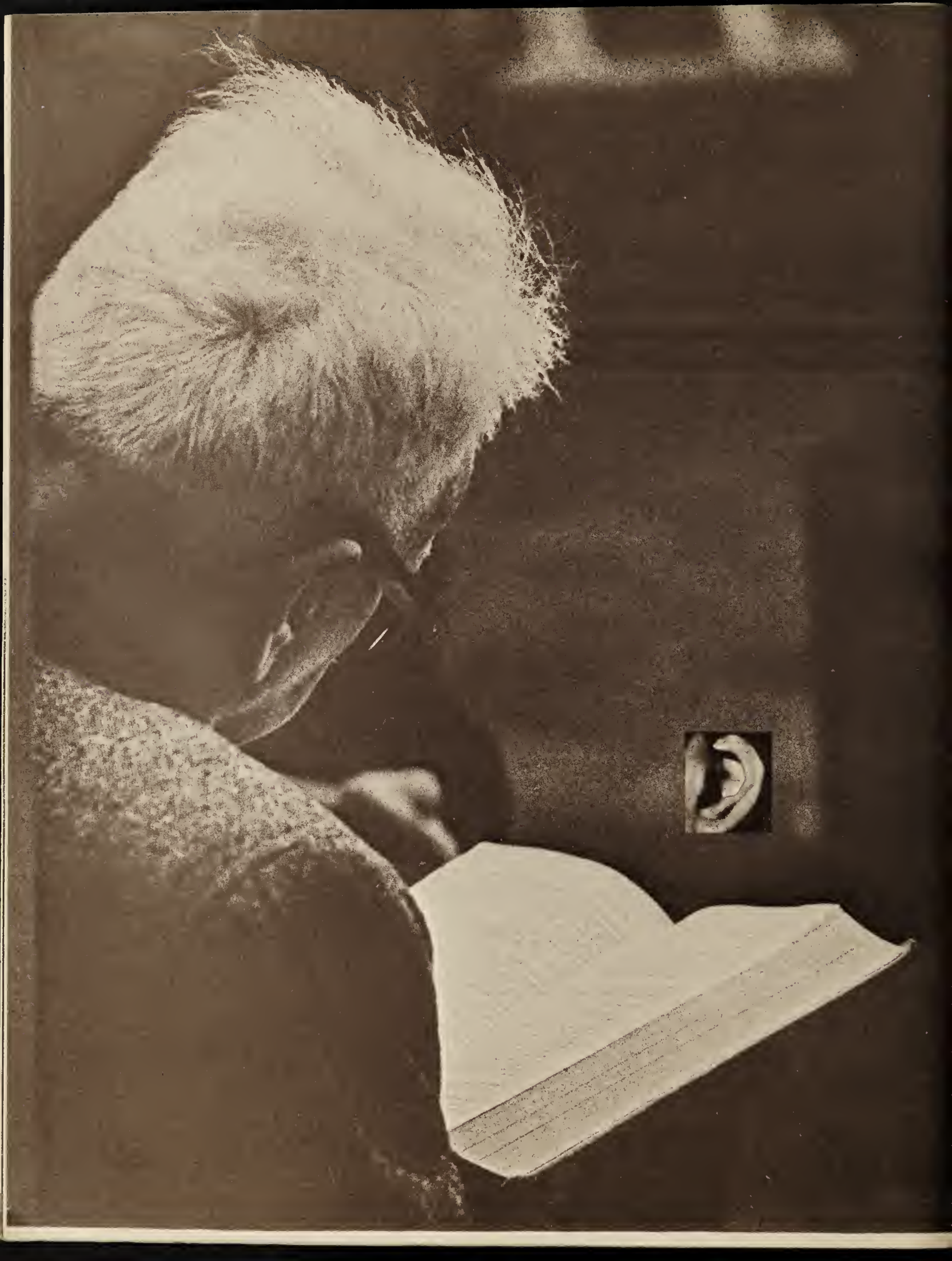
Dr. Allen succeeds Dr. David Glendenning Cogan who resigned as Chief to devote full-time efforts to directing research in The Howe Laboratory of Ophthalmology. Dr. Cogan was concerned that the "divergent but parallel qualities of the investigator and the clinician . . . might threaten the favorable environment in which research had prospered" and thus resigned after six years.

2. The $23 million Massachusetts Eye and Ear Infirmary expansion program scheduled to begin in the spring of 1969 was officially announced at a December 30, 1968 press conference.

3. In November a public announcement was made of a joint study by the M.E.E.I. Department of Otolaryngology and SIGNATRON, Inc. of Lexington to determine the feasibility of detecting disorders of the larynx through analysis of vocal sounds. The project is underwritten by a $283,333 grant from the U.S. Department of Health, Education, and Welfare.

4. Teenage patients and the social service and volunteer departments teamed up to produce "empathy power" for young M.E.E.I. patients via the Youth Volunteer Corps (YVC). YVC was formed so that former teenage patients could reassure other teenagers during their hospital stay. It proved therapeutic for both visitors and patients.

5. To meet the present and projected parking problems, the Infirmary obtained permission from the Metropolitan District Commission (MDC) to build a second parking deck over the southern section of the Storrow Drive cloverleaf parking lot.



FINANCIAL STATEMENTS
AND
STATISTICS

Balance Sheet — September 30, 1968

ASSETS

Cash in Bank and on Hand		$ 1,892,675.54
Investments in Securities — Book Value		9,451,404.26
Accounts Receivable:		
Patients — less reserve for doubtful accounts	$ 626,910.97	
Miscellaneous	10,214,49	637,125.46
Inventories of Supplies, etc.		55,097.19
Unamortized Pension Costs (see note)		107,417.43
Plant:		
Land and buildings	$3,711,452.66	
Furniture, fixtures and equipment	690,221.77	
	$4,401,674.43	
Less: Reserve for depreciation	1,835,843.36	2,565,831.07
Construction in Progress		321,724.33
TOTAL		**$15,031,275.28**

LIABILITIES AND FUNDS

Advances from Patients	$ 12,769.48
Accounts Payable and Accruals	299,839.34
Reserve for Contingencies	80,000.00
Special Funds	37,409.93
General Fund	3,275,529.86
General Pension Reserve	1,134,556.31
Permanent Funds — Income Restricted	1,617,184.51
Permanent Funds — Income Unrestricted	2,769,351.22
Special Purpose Funds	483,908.51
Unexpended Restricted Income of Permanent Funds	308,645.91
Temporary Funds	944,897.37
New Building Construction Fund	321,724.33
Funds Invested in Plant	2,565,831.07
Plant Depreciation Fund	377,655.06
Undistributed Security Gains	801,972.38
TOTAL	**$15,031,275.28**

Note: Under the terms of pension plans adopted September 5, 1955, the Infirmary funded fully, by transfer from Principal of the General Fund, the entire amount of liability for past service benefits as calculated by its consulting actuaries. As of October 1, 1962, the amount by which such prepayments were chargeable to future operations of the Infirmary was reclassified as a deferred charge, to be amortized at the annual rate of $16,400 over the estimated average remaining service lives of participants from that date.

Condensed Income Account — September 30, 1968

Gross Charges for Services to Patients		$5,615,937.66
Adjustments to Gross Charges:		
Allowances to patients	$208,367.19	
Allowances to contracting agencies	103,174.29	
Allowances to Blue Cross	49,106.34	
Provision for uncollectible accounts	7,889.23	368,537.05
Net Revenue from Services to Patients		$5,247,400.61
Other Operating Revenue		301,961.52
Total Operating Revenue		$5,549,362.13
Hospital Operating Expenses (including provision for depreciation — $159,725.26)		5,665,858.69
Hospital Operating Loss		$ 116,496.56
Donated Income:		
United Community Services	$ 31,737.00	
Estates of Elisha V. Ashton, G. Gorham Peters, Samuel C. Howes, and others	43,704.12	75,441.12
Hospital Operating Net Loss		**$ 41,055.44**
Unused Balance of Provision for Share of Expenses of Affiliated Hospital Center		17,625.00
Hospital Net Loss		**23,430.44**

Note A. During the period, hospital expenses aggregating $72,286.27 were charged directly against Permanent and Temporary Funds as follows:

Against Permanent Funds — Income	**$55,282.09**
Against Temporary Funds	**17,004.18**
	$72,286.27

Note B. The Infirmary renders patient care services under contracts with third party agencies, insurers, Medicare programs, etc., at provisional rates which are subject to adjustment after audit. It also engages in research activities under contracts with U.S. Government agencies, the reimbursed costs of which are subject to post-performance review and adjustment. The administrative officials of the Infirmary believe that any amounts reflected in its operating income which may be subject to recovery by virtue of provisions of its various contracts would not be material and have accordingly made no provision therefor in the accompanying financial statements.

Summary of Investment Income

Investment Income Applied to Offset Hospital Net Loss	$ 23,430.44
Investment Income Transferred to General Fund	$349,652.44
Total	**$373,082.88**

Auditors' Certificate

Massachusetts Eye and Ear Infirmary
Boston, Massachusetts

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY as at September 30, 1968 and the related income account for the year ended at that date. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related condensed income account present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1968 and the results of its operations for the year ended at that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Patterson, Teele and Dennis
Certified Public Accountants

December 30, 1968

Summary of Securities — September 30, 1968

	*Book Value**	*Mkt. Value**	*% Mkt. Value*
BONDS			
U. S. Government	$3,719,140	$ 3,639,506	24.08
Canadian Government	29,400	26,100	0.17
Railroad	165,225	125,334	0.83
Utility	1,423,821	1,244,760	8.24
Industrial	482,796	421,716	2.79
Financial	206,065	173,882	1.15
Miscellaneous	62,900	62,900	0.42
TOTAL BONDS	**$6,089,347**	**$ 5,694,198**	**37.68**
PREFERRED STOCKS	**$ 154,534**	**$ 186,665**	**1.24**
COMMON STOCKS			
Railroad	$ 116,049	$ 394,512	2.61
Utility	796,420	1,631,047	10.79
Industrial	1,506,098	5,351,037	35.41
Financial	313,424	948,054	6.27
Insurance	137,492	432,334	2.86
Miscellaneous	25,000	65,100	0.43
TOTAL COMMON STOCKS	**$2,894,483**	**$ 8,822,084**	**58.37**
TOTAL	**$9,138,364**	**$14,702,947**	**97.29**
WEBER FUND (Bonds)	**$ 12,133**	**$ 11,720**	**0.08**
WINTHROP FUND (Bonds & Stocks)	**$ 104,937**	**$ 202,368**	**1.34**
RESTRICTED INCOME (Bonds)	**$ 195,970**	**$ 195,970**	**1.29**
TOTAL SECURITIES	**$9,451,404**	**$15,113,005**	**100.00**

STATISTICAL HIGHLIGHTS

IN-PATIENT HOSPITAL (178 Beds)

	1968
Admissions:	
Eye Patients	6,121
E.N.T. Patients	4,917
Total Admissions	11,038
Operations:	
By Eye House Staff	1,642
By Eye Attending Staff	4,836
Total Eye Operations	6,478
By E.N.T. House Staff	1,228
By E.N.T. Attending Staff	3,305
Total E.N.T. Operations	4,533
Total Operations	11,011
Discharges:	11,008
Deaths	9
Autopsies	33%
Patient Days	57,618
Av. Patient Census	158
Av. Length of Stay	5.22 days
Bed Utilization	88%
Av. Patient Cost Per Day	$68.07

OUT-PATIENT DEPARTMENT

	1968
Eye Clinic	
New Patients	4,638
Revisits	48,118
Total Eye Visits	52,756
E.N.T. Clinic	
New Patients	2,932
Revisits	19,969
Total E.N.T. Visits	22,901
Total New Patients	7,570
Total Revisits	68,087
Total O.P.D. Visits	75,657
EMERGENCY WARD	
Eye Cases	11,195
E.N.T. Cases	8,553
Total (1)	19,748
MINOR SURGERY	2,846

(1) Of these 361 were admitted to the hospital in 1968.

Committees

Executive Committee
William H. Claflin, III, *Chairman*
Henry Hixon Meyer
Horace W. Frost
Melville Chapin
George M. Lovejoy, Jr.
George A. McLaughlin
Mrs. William A. Slade, Jr.
Henry F. Allen, M.D.
Harold F. Schuknecht, M.D.
Charles T. Wood, *Secretary*

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Haruo Saito, M.D.
Tadahiko Takahashi, M.D.

In Memoriam

Frederick H. Verhoeff, M.D.
July 9, 1874–October 22, 1968
1900 – Pathologist
1905 – Assistant Ophthalmic Surgeon
1913 – Ophthalmic Surgeon
1925 – Chief of Ophthalmic Research
1931 – Scientific Director of Howe Laboratory
1932 – Acting Director of Howe Laboratory
1940 – Consulting Chief of Ophthalmology
1948 – Member of the Corporation

Lyman G. Richards, M.D.
March 3, 1893–June 10, 1968
1922–1924 – Otolaryngological Resident
1940 – Bronchoscopist and Esophagoscopist
1943 – Surgeon in Otolaryngology
1952 — Senior Consulting Surgeon in Otolaryngology

Robert H. Hopkins
March 22, 1902–January 17, 1968
1948 – Member of the Corporation
1951 – Member of the Board of Managers
1958 – Member of the Executive Committee

1968 Service Awards

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Surgeon in Otolaryngology
Sumner D. Liebman, M.D.
Surgeon in Ophthalmology
Daniel Miller, M.D.
Surgeon in Otolaryngology

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Gloria Merola
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Germaine Tremblay, L.P.N.

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PUBLICATIONS

October 1, 1967 — September 30, 1968

DEPARTMENT OF OPHTHALMOLOGY SURGICAL AND RESEARCH STAFFS

Aaberg, Thomas M. (See PETERSEN, R. A.)

Ahmad, Busharat (See DOHLMAN, C. H.; HOLMBERG, A.)

*ALLEN, Henry F.: Editorials: "Ophthalmic Assistants." Arch. Ophthal. 78:419, Oct. 1967. "Corneal Damage in Cryo-extraction of Cataracts." *ibid.* 79:1, Jan. 1968. "Ritual or Rationale? Practical Aspects of Ocular Infection." *ibid.* 79:232-233, Mar. 1968. 'The Board's Brochure." *ibid.* 79:510-511, May 1968.

ALLEN, Henry F.: Book Review: *Plastic and Reconstructive Surgery of the Eye and Adnexa.* By B. Smith, J. M. Converse, D. Wood-Smith and M. F. Obear. St. Louis. Mosby, 1967. 548 pp. New Eng. J. Med. 279:51, July 4, 1968.

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The Infirmary is honored that Drs. David G. Cogan, W. Morton Grant, Jin H. Kinoshita and Toichiro Kuwabara, researchers in The Howe Laboratory of Ophthalmology, were named recipients of the 1968 Award for Outstanding Ophthalmic Achievement presented by the Board of Trustees of Research to Prevent Blindness, Inc. This marks the second successive year that the Infirmary has been so honored; Dr. Charles L. Schepens was a recipient last year.

Dr. Cogan is director of The Howe Laboratory which is a department of Harvard Medical School and ophthalmic research division of the Infirmary.

The award consists of an honorarium of $27,500 and a citation stating, "as members of an inspired research team, as individual investigators, they have vastly increased man's knowledge of the visual processes, given important impetus to the progress of eye research, and directly influenced the course of ophthalmic science in its service to those afflicted with blinding diseases."

In accepting the award, Dr. Cogan as principal recipient of the group prize expressed his personal philosophy as a scientist: "Today it's all teamwork and that's why it's important to have people with diverse interests. I think the Howe Laboratory is the embodiment of what was an individual scientist early in the century. Then one man could encompass the basic sciences. Now, things are much more complicated and much more knowledge is required . . . biochemistry . . . electronics and so much more."

RESEARCH TO PREVENT BLINDNESS
TRUSTEES AWARD
for Outstanding Ophthalmic Achievement
is presented to
DAVID G. COGAN, M.D.
and his associates
W. MORTON GRANT, M.D. · JIN H. KINOSHITA, Ph.D. · TOICHIRO KUWABARA, M.D.
of the Howe Laboratory of Ophthalmology, Harvard Medical School
in recognition of their extraordinary contributions to the Science of Ophthalmology.
As members of an inspired research team, and as individual investigators,
they have vastly increased man's knowledge of the visual processes, given important impetus to
the progress of eye research, and directly influenced the course of ophthalmic
science in its service to those afflicted with blinding diseases.
January 27 1968

Overview of proposed new 15-story Massachusetts Eye and Ear Infirmary building. By means of an ingenious design and time-phased construction, the present Infirmary will remain in operation while the new $23 million building virtually goes up, over and around the existing facility. When completed in 1972, the new building will more than triple the 142-year-old Boston specialty hospital's capacities for medical and surgical services, education and research.

Overview of proposed new 15-story Massachusetts Eye and Ear Infirmary building, by means of an impressive drawing and time-lapse construction, the present Infirmary will remain in operation, while the new $32 million building rises directly over and around the existing facility. When completed in 1972, the new building will more than triple the 132-year-old Boston specialty hospital's capacity for medical and surgical services, education and research.

FORM OF BEQUEST

I give to the Massachusetts Eye and Ear Infirmary, a charitable organization organized under the laws of Massachusetts, and situated at Boston, Massachusetts,

.....Dollars.

Massachusetts Eye and Ear Infirmary
243 Charles Street
Boston, Massachusetts 02114

Massachusetts Eye and Ear Infirmary

One Hundred and Forty-third

ANNUAL REPORT 1969

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*Appointed by the Commonwealth

TRUSTEES

(Dates indicate year of appointment)

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Walter H. Trumbull	1929
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Richard Harte	1955
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Leslie Soule	1957
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Thomas B. Frost	1963
John S. Howe	1963
Frederick H. Lovejoy	1963
Thomas Allsopp	1963
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Mrs. John Lowell	1965
Frederick C. Rozelle, Jr.	1965
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Monte J. Wallace	1967
Colin McA. Cunningham	1968
Richard W. Young, Ph.D.	1969
W. Clement Stone — *honorary*	1968

*resigned June 1969

Director

Charles T. Wood

Chiefs of Service

Henry F. Allen, M.D., Ophthalmology
Harold F. Schuknecht, M.D., Otolaryngology

BALANCE SHEET / September 30, 1969

Assets

Cash		$ 1,300,931
Investments — at cost		
Cash in savings bank accounts	$ 1,347,454	
Marketable securities (quoted market value $14,464,161)	10,136,855	11,484,309
Accounts receivable	1,274,358	
Less allowance for doubtful receivables	136,243	1,138,115
Inventories — at lower of cost (first-in, first-out method) or market		60,108
Prepaid expenses		13,178
Unamortized pension costs		91,018
Plant and equipment — at cost		
Buildings	3,715,989	
Furniture, fixtures and equipment	750,353	
	4,466,342	
Less accumulated depreciation	1,974,065	
	2,492,277	
Land	4,701	2,496,978
Construction in progress		887,694
		$17,472,331

Liabilities and Fund Balances

Advances from patients	$ 13,860
Accounts payable	290,770
Payroll taxes and other withholdings payable	90,424
Accrued payroll, payroll taxes and other expenses	38,363
Reserves for contractual adjustments and other contingencies (Note B)	112,375
Special funds	2,147
Special purpose funds	633,866
Fund balances	
Unexpended restricted income of permanent funds	329,392
Temporary funds	573,110
General Fund	3,602,653
General Pension Reserve (Note A)	1,337,188
Permanent funds — income restricted	1,619,561
Permanent funds — income unrestricted	2,773,765
Undistributed security gains on pooled investments	942,835
Funds invested in plant	2,496,978
Plant Depreciation Fund	470,166
Building Fund	2,144,878
	$17,472,331

The accompanying notes are an integral part of this statement.

STATEMENT OF INCOME / Year ended September 30, 1969

Gross revenue			
Services to patients		$6,254,406	
Miscellaneous income		262,179	$6,516,585
Deductions			
Allowances to patients		107,887	
Contractual adjustments		168,048	
Provision for uncollectibles, net of recoveries		139,292	415,227
Net revenue			6,101,358
Operating expenses			
Salaries and wages		3,940,106	
Supplies and expenses		2,225,690	
Provision for depreciation (straight-line method)		164,741	6,330,537
Operating loss			229,179
Other income			
Donated income receipts			
United Community Services	$ 33,626		
Various estates	26,569	60,195	
Unrestricted investment income — net	429,938		
Restricted investment income used for current purposes	11,152	441,090	501,285
NET INCOME			$ 272,106

The accompanying notes are an integral part of this statement.

AUDITORS' CERTIFICATE

Board of Managers
Massachusetts Eye and Ear Infirmary

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY (a Massachusetts corporation, not for profit) as of September 30, 1969, and the related statement of income for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related statement of income, present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1969, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Alexander Grant & Company
Certified Public Accountants

Boston, Massachusetts
December 22, 1969

NOTES TO FINANCIAL STATEMENTS

September 30, 1969

Note A — Pension Plan

Under the terms of the pension plan adopted September 5, 1955, as amended effective October 1, 1966, the Infirmary established a General Pension Reserve for the purpose of funding the liability for pension payments to eligible employees upon retirement. The Infirmary's consulting actuaries reported the initial accrued pension liability remaining unfunded as of October 1, 1968, the most recent date of actuarial valuation, to be $311,059.

The total pension expense for the year ended September 30, 1969 was $176,862, which included $7,796 of direct pensions to retired employees not covered by the pension plan and a contribution to the General Pension Reserve for pension cost accrued, including amortization of additional accrued liability over the expected future active service of covered employees, in the amount of $169,066.

Note B — Reserves for Contractual Adjustments and Other Contingencies

The Infirmary renders patient services under contracts with third party agencies, at provisional rates which are subject to adjustment after audit. It also engages in research activities under contracts with U. S. Government agencies, the reimbursed costs of which are subject to post-performance review and adjustment. For the purpose of providing for such possible adjustments, the Infirmary established reserves aggregating $90,356. In addition, the Infirmary set aside amounts recovered from U. S. Government research grants for workmen's compensation liability assumed by the Infirmary. The aggregate of such recoveries to September 30, 1969 amounted to $22,019.

STATISTICAL HIGHLIGHTS

In-Patient Hospital (178 Beds)

	1969
ADMISSIONS:	
Eye Patients	6,258
E.N.T. Patients	4,798
Total Admissions	11,056
OPERATIONS:	
By Eye House Staff	1,467
By Eye Attending Staff	5,176
Total Eye Operations	6,643
By E.N.T. House Staff	1,198
By E.N.T. Attending Staff	3,277
Total E.N.T. Operations	4,475
Total Operations	11,118
DISCHARGES:	11,058
Death	13
Autopsies	31%
PATIENT DAYS	57,691
AVERAGE PATIENT CENSUS	158
AVERAGE LENGTH OF STAY	5.22 days
BED UTILIZATION	89%
AVERAGE PATIENT COST PER DAY	$75.51

Out-Patient Department

	1969
EYE CLINIC	
Total Eye Visits	52,314
E.N.T. CLINIC	
Total E.N.T. Visits	21,755
Total O.P.D. Visits	74,069

Emergency Ward

Eye Cases	12,623
E.N.T. Cases	9,341
Total (1)	21,964

Minor Surgery

Eye Cases	1,700
E.N.T. Cases	1,329
Total	3,029

(1) Of these 429 were admitted to the hospital in 1969.

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PUBLICATIONS

October 1, 1968 — September 30, 1969

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Takahashi, Tadahido (See ISHII, D.)
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1969 SERVICE AWARDS

Medical Staff

Twenty-five Years

Abraham Pollen, M.D.
Surgeon in Ophthalmology

Non-Medical Staff

Twenty Years

Rita Lovely
Robert McLaughlin
Dorothy Pierce
George Zinck

Ten Years

Ann Gately
Marika Ivanoff
Geraldine Jenkins
Phyllis Paleo
Paul Peloquin
Mildred Petrosky
Wanda Pilarski
Lehan Power
Olga Swanson
Katherine Tartis
Josephine Tomazewski

Five Years

Robert Brown
Gerald Clinton
Kathleen Condon
Marguerite Coughlin
Alan Crist
Ellen Davis
Louise Doherty
Jeanne Dupont
Diane Foster
Mary Fryling
Hiawatha Glover
Barbara LaPoint
Joseph Lockwood
Robert Marshall
Sadie McIsaac
Dorothy Maliocio
Lorenzo Merola
Helen Norian
Carol Richman
Lucy Russell
Gail Sergio
Booker Smith
Katarzna Stukin
Mildred Sullivan
Theresa Therrian
Dorothea Vanelli
Carol Votta
Blanche Wadman
Luke Walker
Ann Weaver

THE STORY OF THE MASSACHUSETTS EYE AND EAR INFIRMARY

Front Cover: The sight of sound: Vibrational pattern created by bar of Mozart overture.
Inside Front Cover: Circa 1913 — Young ear patients.

The story of the Massachusetts Eye and Ear Infirmary seems to fascinate people.

Often our patients, their families and friends, new members of our staff, and myriad other people ask us to tell them more about this famed Boston specialty hospital.

Their inquiries vary from questions about the Infirmary's early history to its present undertakings or our exciting plans for the future.

All this information is located in different places from the hospital archives to our architects' files. To provide answers sometimes involves searching out an historic document — like the medical record of Annie Sullivan, teacher of Helen Keller — or setting forth details of the computer system pioneered by the Infirmary for scheduling patient admissions and surgery.

Every day now there's more to be told. For this decade will mark another milestone in the Infirmary's history. We're building a new $23 million hospital in which to serve our patients, educate their specialists and discover new remedies for their disorders.

Back when the Infirmary's first 'permanent' hospital opened, one of the founding fathers, Dr. Edward Reynolds, wrote: "There are periods in the history of every individual and every institution, in which it is wise to pause for a moment and examine the landmarks that designate its points of progress."

This, too, is such a moment, an appropriate time to review the Infirmary's life story: To enable all of us to appreciate the great amount of good already done here, and by that example to be stimulated to fresh efforts in the years ahead.

Since time is relative we've elected to separate our past, present and future in terms of our facilities. The Infirmary dwelt in its first small quarters in various locations from 1824 to 1899. Then it moved into our present building where we have lived ever since. The 1970's will witness our move into both a new facility and a new era. So we shall tell the story of the Infirmary in that fashion: The past — covering the 1800's; the present — spanning the 20th century to date; and the future — our outreach toward the years of the 2,000's.

We hope the Infirmary's many friends will enjoy this presentation.

Charles Wood

Charles T. Wood
Director

Helen Keller and Annie Sullivan.

HIGHBURN AUCTIONS
SPINLEY'S
VE PALMER

THE PAST

In an historic sense the Infirmary began as a free clinic, a tiny medical dispensary located on the second floor of Scollay's Building in downtown Boston. October 1st, 1824 was the official opening date.

From noon to one o'clock on Mondays, Wednesdays, and Fridays, the city's most impoverished people were welcome to have their eye diseases treated. No fee was ever charged.

But in a deeper sense, the Infirmary originated in the hearts and minds of its founders, in the evolution of medicine into specialties, and in the strong expression of religion through acts of public charity that characterized old Boston in those times.

Dr. Edward Reynolds

"Whoever would study the diseases of the eye must pass by the houses of the affluent, and enter those of the poor. The great majority of all these cases belong to the humbler ranks of society; and have their prolific parentage in the various privations and sorrows unavoidably consequent upon poverty.

"In the unhealthy locations, and the wretched tenements of the poor; in the imperfect ventilation to which they are constantly exposed; in the inappropriate and often insufficient aliment (food); the scanty clothing, the neglect, the want of cleanliness, and the thousand privations inseparable from their lot, you have all these causes combined.

"The sickly hue and the toil-worn features of these poor people . . . as clearly reveal the inseparable union between the health of the body and the health of the eye, as between poverty and disease."

Men of Vision

Dr. Edward Reynolds was the prime mover in setting up the so-called Boston Eye Infirmary. His partner in the foresighted venture was Dr. John Jeffries.

Every account confirms that it was Dr. Reynolds' dynamic personality, professional skill and civic dedication that carried the Infirmary through its precarious infancy.

His views were strong and incisive. In an early report Dr. Reynolds noted: "One of the most remarkable facts in the history of medicine is the utter neglect of the study of diseases of the eye. This profound ignorance . . . is to us who are able to appreciate the suffering and poverty consequent upon uncured diseases of the eye, almost inconceivable."

Of course, he was correct. For it wasn't until the early 1800's that study and treatment of eye disease was brought fully within the realm of general medicine. Shortly thereafter, ophthalmology evolved into the first medical specialty, paving the way for the many medical specialties of today.

Upon his return to Boston in 1818 from an early version of specialty training at the London Eye Infirmary, Dr. Reynolds found his father blinded by cataracts in both eyes. By surgically removing the disease-clouded lenses — a new operation at the time — the young eye surgeon "had the happiness" of restoring his father's sight.

Not even staid Bostonians were immune to the tender drama of that medical achievement. Word spread quickly and soon Dr. Reynolds had countless eye patients appealing for his help.

"Soon revealed," he wrote, "was the fact that the poor and laboring classes are peculiarly liable to these diseases." It was for them, then, "the poor . . . their number increased an hundred-fold by the tide of immigrants" that Drs. Reynolds and Jeffries undertook their "experiment", a separate center for eye treatment.

Dr. Jeffries was the middle-generation member of a prominent medical family. His father was a physician, who incidentally became a celebrity for flying over the English channel in a balloon. In turn, John Jeffries' son, B. Joy Jeffries, became an eye specialist at the Infirmary and earned world acclaim for his work on color blindness.

An Undeniable Need

After a mere 16 months, the need for the Infirmary could never again be doubted. Though Boston's population was only 50,000, nearly 900 patients were treated that first year. It is of interest that 82 of those patients suffered ear trouble. Evidently, laymen felt ear disorders required specialty care, too.

By 1826 the two Infirmary pioneers were convinced their patients' needs warranted full community support. So they organized a committee of socially and professionally distinguished Bostonians; men who, again in the spirit of the era, were religiously humanitarian. This group truly saw the Infirmary "as God's work" and proceeded to give their time, talent and money to its reformation as a hospital. By February of 1827 they had

The Scollay Building where the Mass. Eye and Ear Infirmary began as a tiny medical dispensary in 1824.

the Infirmary incorporated under a state charter. Renamed the Massachusetts Charitable Eye and Ear Infirmary, it occupied successively larger quarters during the ensuing 20 years, as demand for its specialty services steadily grew.

Dr. John Jeffries

"The eye though small in bulk is complicated in structure. It presents a specimen of every texture of which the body is composed; and consequently of every disease. No organ is found to possess more intimate sympathies with all others than this . . . or is more prone to feel the result of all causes that tend to produce a derangement of the general system."

The benevolence of these men was matched by that of the women of Boston who started at the Infirmary one of the first hospital auxiliaries in the country. They brought homemade food, personal articles and the comfort of a friendly visit to the then long-hospitalized patients. Though not formally organized as the Ladies Visiting Committee until 1915, their history like the Infirmary's goes back to the early 1800's and continues uninterrupted today. Now, however, their help is far more extensive. As fund-raisers and volunteers they provide the "extras" . . . whether it's a desired research tool, insulated dishes for patients' meals, a convenient gift shop, or a reception to honor extraordinary service.

Heroic Efforts

To make suitable rooming-in arrangements for patients was a far different matter then, than it is today. Those needing surgery had to be operated on in nearby boarding houses. And as the Infirmary's reputation rose, patients began arriving from "the most distant parts of the state."

Some of the old journals note the "influx of strangers without money and without friends, with no place of abode on their arrival and no means of procuring one. A large portion of these cases were of serious character; some requiring delicate operations and several weeks' attendance; and some so aggravated by the journey to the city as to render a return home impossible."

It was only when the Gore mansion — Rev. Samuel Parkman's home — became available in 1836 that these patients could be properly accommodated and rooms set aside for surgery.

Yet, summing up later, Dr. Reynolds could say of the heroic efforts made in the patients' behalf: "In a word, the blind were made to see; and the deaf to hear; and

Eye treatment performed at bedside. Boston Herald news illustration 1889.

BOSTON EVENING TRANSCRIPT

Extract from Transcript of Friday, Nov. 26, 1830.

Eye and Ear Infirmary

The whole number of cases admitted at the Infirmary from October, 1829 to October, 1830 was 622, of which 471 were cured; 45 relieved; 31 incurable; 17 not treated; 12 left town or result unknown; 4 declined treatment and 42 are now patients.

The whole number treated since the establishment of the Infirmary is 3232.

hundreds were relieved of diseases, which if not necessarily fatal to vision, were by their annoyance, constantly interfering with the freedom of labor."

Obviously, a permanent building was essential. Through contributions from donors and the state (which paid half the cost) a new $65,000 facility was built in 1850 on the Charles Street site of the present Nurses' Residence.

At first the "new" Infirmary could accommodate only 39 patients, but a wing added in 1881 increased the bed capacity to 90. During this period the prevailing ratio of six eye patients to each one with an ear ailment began to shift; the number of ear cases increasing to one of every three. Thus, by 1868, the Infirmary appointed its first ear surgeon, Dr. Clarence Blake, to the staff.

At Best, Limited

Like other hospitals of the era, the Infirmary functioned largely as a medical shelter, providing "good air", wholesome food, convalescent care, and most of all a period of respite to build up patients' general strength. Often the "cures" reported by Dr. Reynolds were the result of doctors providing Nature with a skillful helping hand. By modern standards their olden-day remedies seem simple and limited. But they were the most advanced medical practices of the times, and often worked surprisingly well.

Clearly, infection was the cause of the prevalent eye and ear disorders. More than half of the Infirmary's eye patients were afflicted with trachoma, a disease now known to be due to a virus. Rare in the United States today, trachoma is still the single greatest cause of blindness in the modern world, though it is readily treatable with drugs. A hundred years ago, however, trachoma was the scourge of the poor of Boston, as was tuberculosis and other bacterial infections that spread to the eye. Similarly, the majority of ear cases recorded the problem as "running" ear.

Little was then known, however, of the process underlying infection. It was thought to result from such things as poor ventilation, the stagnation of "putrid human exhalations", or even the stench that arose at low tide from the mudflats of the Charles River.

It was impossible to blame infection on "germs" because Pasteur had not yet shown that those organisms exist; and not until 1865 did Lister find that carbolic acid, among other chemicals, could kill them.

With the Inner Harbor in the background, the Massachusetts Charitable Eye and Ear Infirmary 1850.

At the Infirmary, as elsewhere, agony and physical shock were still the grim price paid for surgery. After all it wasn't until 1846 that ether would guarantee painless surgery . . . America's first major contribution to medical science.

Moreover, there were no nurses, as such, to tend the sick. In London, five years passed before the example set by Florence Nightingale in the Crimean War was followed and the first training school for nursing started in 1859. Twenty more years went by before one opened in Boston.

In keeping with custom, nursing care at the Infirmary was given by a "matron" assisted by four domestics. The most unsung of heroines, the matron was in full charge day and night. Surgeons were in attendance only during clinic hours until 1872 when a physician was first appointed as superintendent. The matron was responsible not only for nursing, but also for housekeeping, mending, cooking and serving meals, purchasing supplies and supervision of employes. Documents in the Infirmary archives carry eloquent tributes to these seemingly tireless, devoted and gentle women.

Patient Perseverance

In those days ambulatory patients had to help care for those confined to bed and to do light kitchen chores and housecleaning. Nor was there anything fancy about the food served. In fact, one year a comparison of diets at the Infirmary, Boston City Hospital and Charlestown Prison showed the prisoners fared the best.

It would be mistaken, however, to imply that the rigid economy exercised at the Infirmary stemmed from stinginess. Rather, it was wholly a matter of economic survival. Although the Infirmary was the fifth eye hospital started in the United States, it was one of the two that managed to stay open. Its early managers were determined "to preserve it under all circumstances free of debt." At the same time they made equally sure its doors were never closed to any applicant "whom it was able to receive."

In the beginning all patients were "charity" cases. Fairly soon, however, arrangements were made for "worthy" cases — even if the patient had some money. These paid about $3 a week while hospitalized.

Upon admission, each patient automatically was assigned a bed for a minimum of two months. Every stay, of course, was subject to continued "good behavior." Life in the Infirmary must have been terribly trying and tedious, but the chance to see or hear again made it well worth while.

One case, Annie Sullivan's, speaks for itself. She'd been blinded by the dread trachoma just before her eighth birthday. Her vision was blocked by a condition called Pannus, which means that the cornea of each eye had become abnormally coated as though a 'piece of cloth' covered the surface.

Baby is treated in ear clinic. Boston Herald news illustration 1889.

First abandoned, then orphaned, Annie and her younger brother were left to the mercies, such as they were, of the Tewksbury Almshouse where the state housed the rejects and unwanted of society.

Transferred to the Perkins Institute of the Blind, she was so violent and earthy she was judged unteachable and placed out for work in a lodging house. She heard of the Infirmary and on the fateful morning of August 6, 1881, bullied an old man into guiding her there.

She became the second patient on whom a new surgical procedure was tried, and the first to have it succeed. In brief, the operation "starved" the pannus, which thinned and largely disappeared, leaving the cornea clear once again.

When she entered the Infirmary she could only distinguish between darkness and light. More than three months later when she left she could make out words on a printed page, look out her window and count the bricks on a nearby wall. She even could thread a needle. In her own words, she was a freed woman and attributed this priceless new chance at life to "the wonderful Massachusetts Eye and Ear Infirmary."

She vowed to become a teacher of the blind. Within five years she kept her word and began her rendezvous with destiny; taking into her charge the wild seven-year-old, blind-deaf child who would become the gracious Helen Keller.

Teaching Toward the Future

From its earliest years the Infirmary also played a leading role in the development of the medical specialties relating to the eye and ear.

Drs. Reynolds and Jeffries from the outset had invited physicians and students to observe eye and ear cases and learn treatment techniques. Lectures, begun in 1830, were formalized as a course of instruction by 1837 for Tremont Medical School students. This school, co-founded by Dr. Reynolds and three other Boston physicians, later was assimilated by Harvard. In its own right, however, the Tremont school developed a coterie of brilliant young teachers including such medical luminaries of the day as Oliver Wendell Holmes.

The Infirmary's link to Harvard Medical School came about in 1869 when clinical instruction in ophthalmology was initiated on a voluntary basis. For a brief period thereafter, formal ophthalmology courses for Harvard medical students were taught at Boston City Hospital until in 1895 all such training was transferred exclusively to the Infirmary.

In 1888 the Infirmary's ear service (otology) became similarly affiliated with Harvard. Another custom instituted at that time still carries on: Chiefs of the Infirmary's specialty services also serve as professors and chairmen of the departments of their respective specialties at Harvard Medical School.

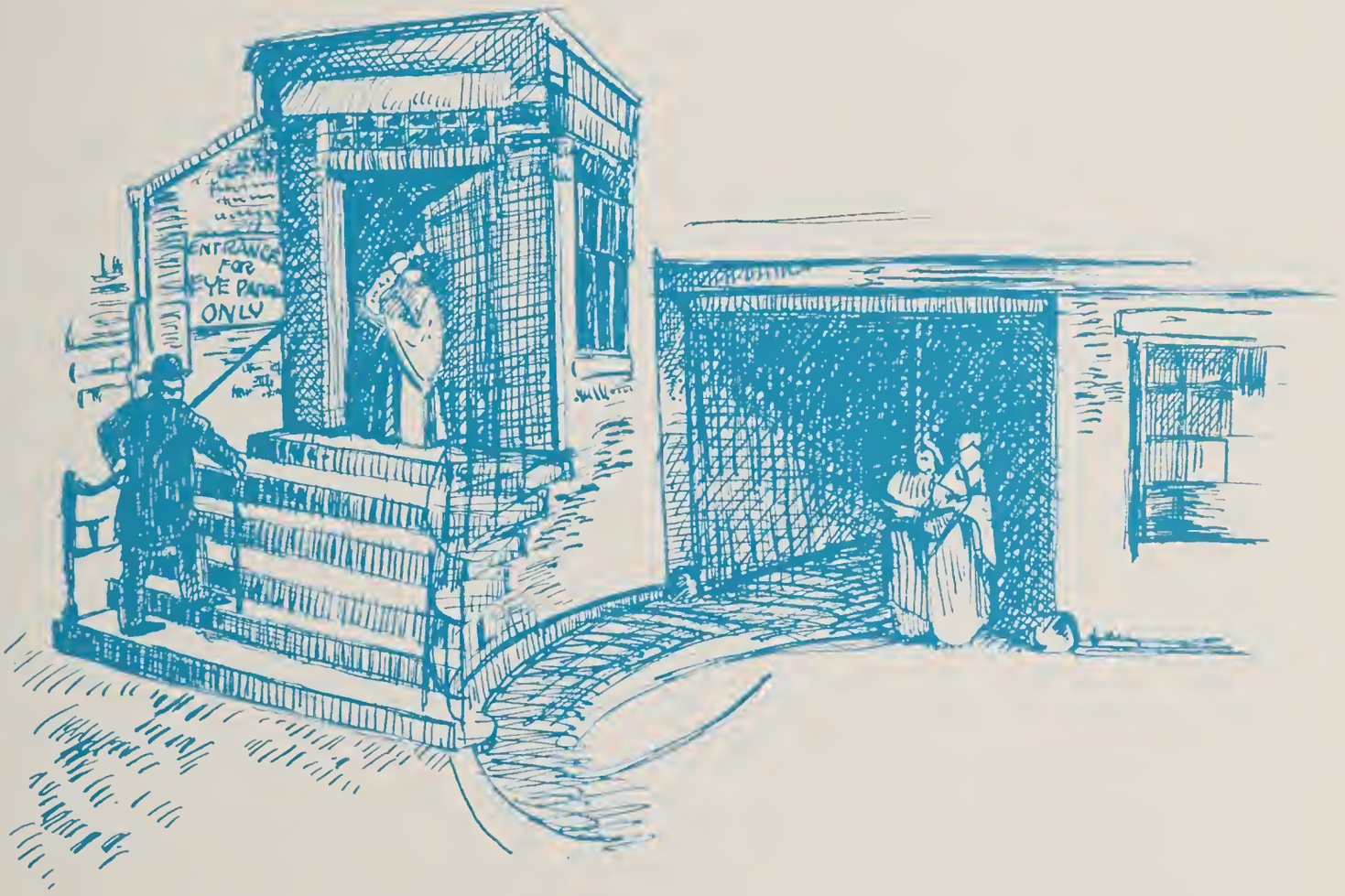
Then as now the Infirmary's teaching programs directly benefited patients; each new medical gain being quickly shared and applied to patient care.

Medicine in the main, however, was still far more art than science. Patients would fit themselves with glasses kept in a box in the Infirmary's entryway. The only testing instrument in the ear clinic was an old dinner bell. Other aspects of medicine taken for granted nowadays, simply didn't exist. Blood or other kinds of tests were not taken because there was no pathology lab. There were no sedatives or tranquilizers beyond whiskey and brandy. X-rays were not even envisioned. Above all the golden age of medical research had not yet dawned.

For most of its early life, the Infirmary, as its name suggested, was a haven for the infirm and sick where, insofar as it was known, the finest "specialty" medicine was practiced.

Scientific purpose never overshadowed the basic tenet upon which the Infirmary was founded: The humane conviction that enlightened people hold a responsibility to alleviate suffering.

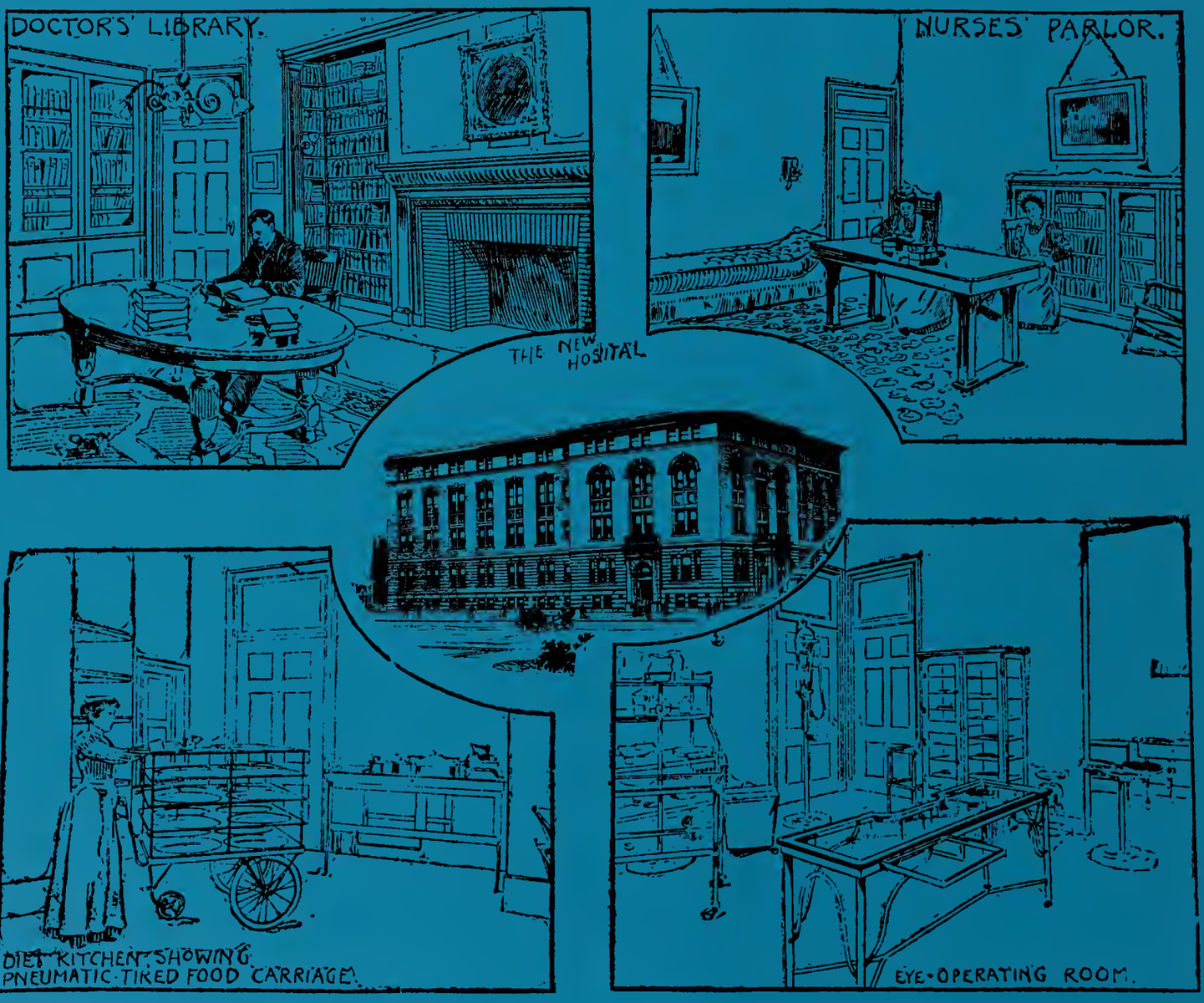
Nonetheless, the wheels of medical progress were turning. By 1899 when the Infirmary moved into its present building, it also crossed the threshold into the 20th century's wondrous new era of medical marvels.



In keeping with the protocol of the day, patients used the side entrance. Boston Herald news illustration 1889.

MODEL EYE AND EAR INFIRMARY.

New Building on Charles St Will be Opened Today and Will be Inspected by Gov Wolcott.



Boston Globe headlines opening of Infirmary's "model" new building. March 1899.

On the eve of the 20th century in 1899 when the present Infirmary opened, it was the best of its kind anywhere.

Proclaimed in newspaper headlines as a "model" facility, it featured such new-fangled gadgetry as electric lighting, telephones and modern plumbing.

Right out front, electric streetcars of the Boston Street Railway line brought patients to the doorstep.

And indoors, the Infirmary's specialty services were abetted by the most up-to-date equipment, furnishings and accommodations. Operating rooms were walled with ceramic tile, a very new use of that material. All furniture was metal, including bedsteads which before always were wood. A complete ventilation system was an innovation of great pride. The highest quality instruments had been purchased, even though acquiring them meant trips all the way to New York City . . . and even one to Europe.

The land, a 30,000 square foot plot, cost $82,000; and the building and equipment, another $200,000. That was big money even for the expansive mood of the day, grandly known as the age of Peace, Prosperity and Progress.

All patients were housed in "open" wards. Circa 1915.

By today's standards the arrangements for ambulatory patients seem stern. While waiting to be examined, they sat on serviceable but hard wooden benches ranged along the walls of darkened, clinic rooms. When admitted, all shared large, open wards. No private patients were treated at the Infirmary until 1915.

More Specialties

At first there were just the two specialty services — eye and ear. Each maintained its own separate clinics and operating rooms as they still do.

Although a few nose and throat operations had been performed in 1889, the number of these procedures had multiplied so rapidly in the intervening years that nearly 800 were carried out in 1908.

As early as 1904 the Infirmary's Board of Managers detected the need to broaden the Infirmary's special domains. "It is increasingly evident," they noted, "that proper attention to the condition of the nose and pharynx is necessary to the adequate treatment of the average patient. . . . To refer such cases to clinics for special treatment of nose and throat diseases in other hospitals would impair our efficiency as a form of public service."

Clinic care — circa 1910.

In 1932 the nose and throat services won full recognition with the creation of a distinct department of otolaryngology at Harvard Medical School, to be headed by one chief and housed exclusively at the Infirmary. Dr. Harris B. Mosher was first to hold that combined stewardship — the first full-time professor in those specialties ever appointed by any school in America.

Dr. Mosher already was chief of the Infirmary's throat service set up in 1925. That year, largely as a result of his forceful leadership, the American Board of Otolaryngology also was formed. He was its first president and so remained for 22 years. A prodigious worker, he stressed the importance of anatomy as the basis of surgery and authored more than 100 scientific papers during his career.

Sophisticated Isolation

As it ventured into the present, the Infirmary inscribed two other outstanding chapters into its life story. One was its sophisticated isolation of patients with contagious diseases; the other, its visionary social work.

It should be borne in mind that "cure" medicine is a phenomenon of this generation that began in 1934 with the discovery of germ-inhibiting sulfa drugs. They soon were followed by the germ-destroying wonder drugs, the antibiotics, precociously developed during World War II.

Before then, fear of infection was a spectre that haunted every hospital administrator. It posed a double-edged threat. One was the contagion admitted

to the hospital deliberately because the affected patient required care. Other forms of contagion broke out during hospital stays, like measles, scarlet fever or diphtheria. All now are easily prevented or managed, but once were formidable complications.

The Infirmary pioneered new arrangements for such patients. A complete, separate 30-bed facility — named the George A. Gardner building in honor of the Infirmary Board of Managers president who paid for it — was built adjacent to the main hospital. The Gardner was the first building in America devoted entirely to treatment of contagious diseases of the eye and was hailed as one of the great advances in hospital care.

In it were developed systems for greater and lesser degrees of patient isolation, depending upon the virulence of the contagion. Medical and nursing staff members lived-in so as not to be "carriers." Along with simple medicines that were moderately effective in stemming eye infection, the basic treatment was regular and thorough eye washing. Patients, usually infants and young children, typically stayed in Gardner for weeks to months . . . and, of course, without visitors!

Happily by mid-century the curative drugs ended the need for such rigorous isolation. The Gardner then was converted to a second phase of usefulness as a teaching and research center. In 1970 it was razed to free land area to expand the base of the Infirmary's future facility.

Social Service Starts

Early in the century, the Infirmary probed anew into ways to totally care for its patients, who still were the poorest of people. Bad hygiene, malnutrition and superstition often contributed heavily to their eye and ear maladies. Worse still, when handicapped by blindness or deafness they were virtually doomed to a shut-in's existence or the almshouse.

George A. Gardner Building — first isolation hospital in America for contagious disorders of the eye.

In 1907 the Infirmary became the second hospital in the United States to establish a social service. The object was "to discover by . . . work among the patients whether something might be done . . . for the prevention of blindness. Since infections that spawned in squalid living conditions were then still a major cause of blindness, the obstacles to be overcome were fear, shame, ignorance and neglect. The social worker was to befriend such patients, serving as spokesman, health educator and guide to rehabilitation.

Infants with infectious eye diseases are treated in Gardner isolation building. Circa 1920.

"Of special concern were the babies born with eye disease caused by infection in the mother and leading to blindness if not treated quickly. The families' fear of leaving the babies in the hospital, the finding of wet nurses for babies whose mothers were unable to come to the hospital to breast feed them, and helping families to accept treatment" according to one report "were the usual concern of the social worker."

This vital assistance grew so steadfastly at the Infirmary that the chief of the eye service stated in 1926: "I think that the chief claim to distinction for the Infirmary at present lies in the development of social work, along with the medical, so that it is now I believe operating better than any other hospital I know of in the world."

Research Begins

Prior to 1900, no research in a modern sense had been attempted into the causes of eye or ear diseases. That year, however, "in order to make the greatest possible scientific and education use" of the Infirmary, the Board of Managers created the office of resident

Children's Ward — Circa 1915.

pathologist. Named to the post was Dr. Frederick Verhoeff, who had received his M.D. degree only a year earlier. With youthful zest, he did it all himself at first, not only setting up the first eye pathology laboratory in the country, but even performing all the lab tests, doing all the microscopic sections and cultures, and even sharpening his own instruments when necessary. Relentlessly he encouraged the creation of an endowed research department. Meanwhile pursuing his own intensive research, he won the coveted Knapp Medal in 1922 for work on tumors of the optic nerve.

Soon thereafter, a great friend of the Infirmary, Dr. Lucien Howe, gave $250,000 to Harvard Medical School to fund the now world-famed Howe Laboratory of Ophthalmology that bears his family's name. It was the first endowed eye research laboratory in this country and the first to establish career investigators on a continuing basis.

During these years the Infirmary also was training men and women to staff the hospital's specialties and to serve the nation and the world. Of immeasurable value both to the resident-in-training and the patient is the extent to which Infirmary research is linked to clinical use: As soon as discoveries are of proven worth they are brought from the laboratory to the bedside or operating room.

The late 1920's also saw the start of ear, nose and throat (ENT) research. Centered in the Mosher Laboratory, ENT research first focused on bacterial and anatomical studies. In time, however, these investigations expanded in size and variety. Now they encompass such sub-specialties as electron microscopy, microcirculation, histochemistry, otoneurology, rhinolaryngology, otopathology and experimental surgery.

One of the hallmarks in ENT research was the alliance formed in 1959 with the Massachusetts Institute of Technology, which created the Eaton Peabody Laboratory of Auditory Physiology. Here in sound and vibration proof chambers, teams of doctors, neurophysiologists and electrical engineers work together to probe the basic phenomena of hearing.

Under critical exploration is the role played by the nervous system in hearing, because a principal kind of deafness — nerve deafness — has to do with faulty pick up and passage of impulses of sound on the way to the brain. Often nerve deafness results from lengthy exposure to loud noises and it also is associated with the aging process. Frequently it accompanies other forms of hearing loss. Since relatively little is known of the fundamental processes at play, doctors still can do little to correct nerve deafness.

Medicine's Mid-century March

Many major medical strides were taken at the Infirmary during the present century. Most came about in tandem with the forward march of medicine itself; and medicine certainly moved at an unprecedented pace.

For eye, ear, nose and throat specialists, as for physicians in general, discoveries in the natural sciences began to put the art of healing on a sound footing for the first time.

Biology, for example, moved deep into the intricate inner workings of the cell; fathered new sciences with profound medical implications such as genetics; and merged with chemistry into the far more complex modern sciences of biochemistry and molecular biology.

Research reached to the very stuff of life itself: To DNA and RNA, nucleic acids that blueprint what every cell will be and do; to enzymes, proteins that make the machinery of life work; and to other life and health critical substances.

First scientists unravelled such compounds, chemically, and then put them back together, synthetically. As various compounds were understood, many took on important new medical usage, such as hormones like insulin. Other research not only discovered how chemicals work within a cell, but also how cell-work may be harmed by "foreign" substances, including infectious agents like the virus — which may be a household word today, but whose existence wasn't proved until 1931.

Equally exciting was the new array of "tools" by which medicine could get better information: Devices that let physicians see inside the body via X-rays, finitely examine tissue under electron microscopes, precisely monitor internal organs electronically, and map and track the inner workings of the human system with such totally new aids as radioactive substances.

The transition from the old to the new didn't occur overnight. Many of the advances didn't come into routine use until the century was at mid-mark.

Gains Pose New Problems

Ironically, some of the most significant gains generated new problems associated with improved survival at birth and longer life expectancy. For example, diabetics and older people now live long enough to develop cataracts, retinal defects and glaucoma in their eyes and the hearing disorders wrought by aging. Premature and/or congenitally impaired infants can be saved today, unfortunately increasing the number of children born blind, deaf, or both.

To show how much the work of the Infirmary has changed, a quick spotcheck of the records indicates: During the 1920's the most frequent operations at the Infirmary were for the ear infection, mastoiditis, and for cataracts of the eye. Now, eye surgery is performed in thousands of cases of detached retina and to transplant corneas, while similar numbers of ear operations are performed under microscope to replace the delicate stapes bone and restore hearing, or to rebuild injured or diseased larynges (voice boxes).

At the Infirmary the impact of the new drugs was felt most strongly on infections of the surface layers of the eye, and on ear infections that struck the mastoid bone. Effective treatment of those once prevalent eye and ear disorders, however, meant greater attention could be turned toward the more intractable problems.

Infirmary Highlights

To its credit the Infirmary has made notable contributions in its fields, adding much to medical knowledge and techniques that improve or restore sight, hearing and speech. Among the most significant during the present era are:

EYE

- First diagnosis and naming of "retrolental fibroplasia," blindness caused in premature newborns when exposed to too much oxygen.
- Refinement of corneal graft operations to reverse blindness caused by impairment of the cornea, the clear "window" of the eye.
- Outstanding research in glaucoma, the most common cause of permanent blindness in older patients; development of a new method called tonography for measuring the damaging increased fluid pressure in the eye that characterizes glaucoma. Tonography, thus, permits early diagnosis and vision-saving treatment.
- Compilation of an encyclopedic work on toxicology (poisons, irritants and their antidotes) of the eye.
- Basic research in learning the cause of cataracts, the most frequent cause of vision loss in the elderly; fortunately a condition readily overcome by surgery and eyeglasses.
- Fundamental research into the effect of diabetes on the retina, the innermost layer of the eye that functions like the film of a camera receiving and sending a "picture" of what is seen to the brain.
- Development of a surgical technique, sometimes involving use of an *overhead* operating table, to repair detached retinas; more than doubling the percentage of success and making many previously hopeless cases treatable.
- Discovery of the first drug to cure a virus infection; herpes simplex, which causes bland "cold sores" on the lips but is devastating when it attacks the cornea.
- Devising of combinations of plastic and human cornea tissue for corneal transplants as well as new techniques for glueing such semi-artificial transplants in place.
- Fundamental research into the effect of intense light and radiation on the eye.
- Public education of potential vision loss in preschool children due to eye muscle imbalance, or as it is familiarly known, "lazy eye."
- Establishment of the first clinic to be devoted to the treatment and care of patients suffering from separation of the retina.
- Operation of the Boston Eye Bank that serves all New England in obtaining eye tissue for sight restoring corneal transplants and related research.
- Pioneer use and refinement of photocoagulation, laser beam and ultra-cold instruments in eye surgery.
- Initiation for Harvard Medical School of a basic science course for young ophthalmologists, the first of its kind which served for models of other courses now standard in this country. Subsequent Infirmary sponsorship of similar training under the Lancaster Course each summer for residents in ophthalmology from across the nation.

EAR

- Investigation of otosclerosis, abnormal bone formation in the ear causing chronic, progressive deafness,

Special techniques assure accurate hearing tests in youngsters.

Peripheral vision is electronically measured.

Surgery during the early 1900's.
Surgery in the '70's.

Red Sox rightfielder Tony Conigliaro, his sight restored following a serious eye injury, chats at Fenway Park with his doctor, Infirmary eye specialist Charles D. J. Regan.

B

and its relief by fenestration operation; and more recently "stapes" surgery which restores hearing by freeing the motion of the stapes bone or by replacing it with a miniature metal prosthesis.

Vietnamese war orphan Vo Tanh underwent treatment for eye injuries and ear infections at Infirmary in 1969.

- Formation of the Winthrop Foundation, one of the first complete services for the deaf. Audiologists in the Foundation were among the first to show that very young patients could be trained to use a hearing aid, thus allowing early speech training and rehabilitation.
- Studies of nerve deafness that advanced accurate diagnosis of this type of deafness in young children.
- Basic research via computers, elite electronic monitors and highly miniaturized equipment to learn how the hearing process works by translating it into electrical impulses.
- Pioneer research into the underlying nature of Meniere's Disease, that causes dizziness due to a build-up of inner ear fluids that control normal balance.
- Operation of the Eastern Temporal Bone Bank for the study of relationships between abnormal ear structure and deafness of unknown cause.
- High magnification electron microscope studies of cells in the inner-ear organs of hearing, to correlate changes in sub-cellular structure with hearing loss.
- Basic research in the field of microcirculation; the area where exchange of all material between blood and tissue takes place in blood vessels millionths of an inch in size.

NOSE AND THROAT

- Original techniques in plastic surgery of the face and jaw.
- Pioneer work in laryngectomy surgery for relief of cancer of the throat.
- Development of a unique method to teach those who've had their voice box removed due to cancer to speak again with esophageal speech.
- Formation of a succession of surgical techniques to repair paralyzed vocal cords, thereby restoring speech and other laryngeal functions.
- Investigations to determine whether computer analysis of voice wave patterns may allow early detection of laryngeal disorders, including cancer, before overt symptoms appear.

ADMINISTRATION

- Pioneer use of a computer system for scheduling patient admissions and surgery, to maximize bed usage and minimize cost.

Demand Intensifies

Repeatedly through the years the Infirmary has felt the pinch of space. Although a complete fifth floor was added in 1950, the demand for services has so intensified, the hospital again has outgrown its room.

In a ten year span, the independent, non-profit 179-bed Infirmary has had clinic visits soar to 75,000 per year. More than 11,000 patients now are admitted annually, some travelling to the Infirmary from distant parts of the world. Bed utilization is almost constantly near the 90 percent mark, one of the highest rates in the country. Costs have gone up, too, but largely due

Miniscule stapes bone of the ear. Replacement often restores hearing.

The Infirmary's specialty-trained nurses generate patient confidence.

to efficient scheduling plus careful economizing, the rate of rise has been a lot lower than all other hospitals.

Most dramatic, however, is the striking rise in patients who come to the Infirmary for emergency care. In a decade their visits have surged from 9,000 a year to nearly 22,000. Of these, more than 3,000 require immediate minor surgery. And all must be cared for in two small suites of examining rooms.

The Infirmary's outreach into the community has lengthened, too, extending to screening clinics to detect chronic eye disorders, lectures to civic groups and the preparation of various educational booklets that are widely distributed.

Serving its patients the Infirmary now has a staff of 90 eye specialists and 60 ear, nose and throat specialists. More than 120 RNs and LPNs are assisted by 60 in-service trained nursing aides and orderlies. Forty residents and research fellows undergo specialty training yearly. More than 700 employees man three daily shifts. Some 300,000 meals per year are served, more than 55,000 X-ray films processed, and nearly 60,000 lab tests carried out.

Compassionate Excellence

But nameless numbers in no way reflect the spirit and calling of the people of the Infirmary who make it the proud and purposeful place that it is.

Every member of the Infirmary staff is aware of the singular work that is undertaken here. Personal kindness and individual concern are as much a tradition as is professional expertise.

Perhaps it's the life-altering nature of the medical conditions treated at the Infirmary that stirs the staff to give unstintingly of themselves. For every Infirmary patient no less than a vital sense — his sight, hearing or speech — may be at stake. Compassionate excellence, then, is the only standard acceptable.

There is ample reason to believe patients sense this diligence and devotion for as one recently wrote:

"In a short time I will be leaving this hospital. It is impossible for me to fully express my feelings concerning the care and treatment I have received.

"During my 24-day stay every person on the staff has been good to me. I have not heard one unkind word. This includes supervisors, nurses, LPNs, the aides, orderlies and household cleaning personnel, as well as the people who took the daily menu. Every employee on all shifts has done so much to make my stay here easier and successful.

"I came here as a stranger and am leaving with many fine friends and memories. My condition is not completely solved and I will return when the time is right. I look forward to that day."

Thus, the purpose of the Infirmary remains as it began . . . to provide the highest order of specialty medicine on the most humane terms.

In an unfinished loft near the Infirmary, the hospital's future already is taking shape.

For there stands a model of its inpatient rooms of tomorrow: A prototype of the form that care will take here for long years to come . . . well into the 21st century.

Nor is the model merely a tantalizing dream. Rather it is a replica of the rooms patients will begin to have for their use by 1973.

Such rooms are but one facet of the wholly new $23 million Infirmary that now is under construction. Via a unique design, the architects have blueprinted a structure that can be built atop and aside the present Infirmary, thereby preserving its historic location despite limited land.

Most of the new building will rise above the old. Substantially enlarged at the base, deeply sunk columns plus massive center-spanning trusses will support eight "free-standing" new floors. Then by shearing off the Fruit Street side of the present building, the wing can be redeveloped. Here the main entrance will be relocated. The entire ground floor will be recast for ambulatory patient use, especially emergency services, and for the first time will include a drive-up ambulance entryway.

To allow medical-surgical services to continue without interruption while the new facility goes up, construction has been organized in carefully timed phases. These will proceed over several years and conclude with a general renovation of the existing structure.

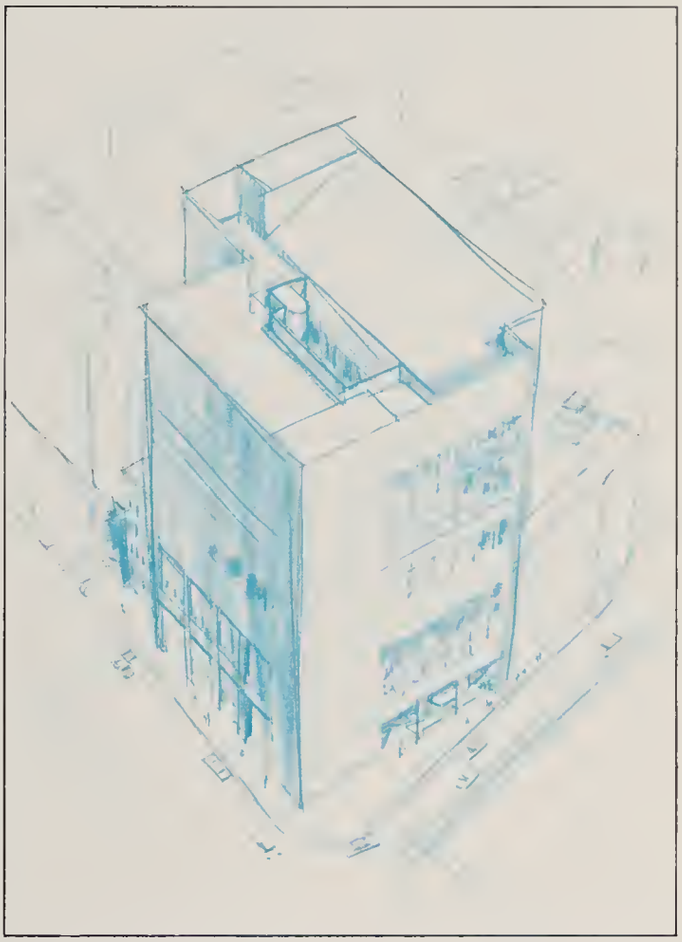
When the whole project is complete the present Infirmary's medical, educational and research capability will be tripled.

Visible Symbol

For the moment, however, the patient-room module is the most visible symbol of the Infirmary's commitment to the future well-being of its patients.

Equipped to permit the fullest and most advanced interplay of medical techniques, the room also adjusts to varied patient needs and individual tastes.

A key feature is the readiness with which it adapts to single or double occupancy. Such flexibility is expected to reap substantial dividends in patient comfort and in savings through efficient room usage.



An appealing decor, yet one that is practical in terms of upkeep, will prevail throughout the rooms — a blend of warm-white walls, grained wood, earth-toned carpeting and bronzed metals.

A thermopaned, solar-glass window-wall in each room will serve to admit natural lighting while preventing glare. These wall features will eventually pay for themselves in terms of fuel savings.

Complete climate control — combining cooling, heating and humidifying — will be installed as much for medical as personal reasons. Many of the Infirmary's patients require moist warm or cool air to alleviate post-operative physical distress.

A new concept is the individual "medicine chest" that will ride along a track behind each bed. These chests, solely for professional staff use, will contain the specific drugs and instruments for the respective treatments designated.

At each bedside will be a portable console with push-button, finger-tip control of the room's lighting, call systems and other electrically operated apparatus. The consoles were selected to minimize patient exertion for those whose physical activities should be as limited as possible. A side benefit is that the console is instantly replaceable should repairs be necessary.

Perhaps the most outstanding quality of the rooms is the attention given to lighting and sound control. The arrangements for different levels of lighting are without equal in adaptability to both patient and medical use. High intensity extension lamps, attached to each console, will be available for close-up examinations of patients. They also will permit one patient to read without disturbing a roommate. Other lights adjust by rheostat from bright to dim to serve as night-lights for nursing rounds.

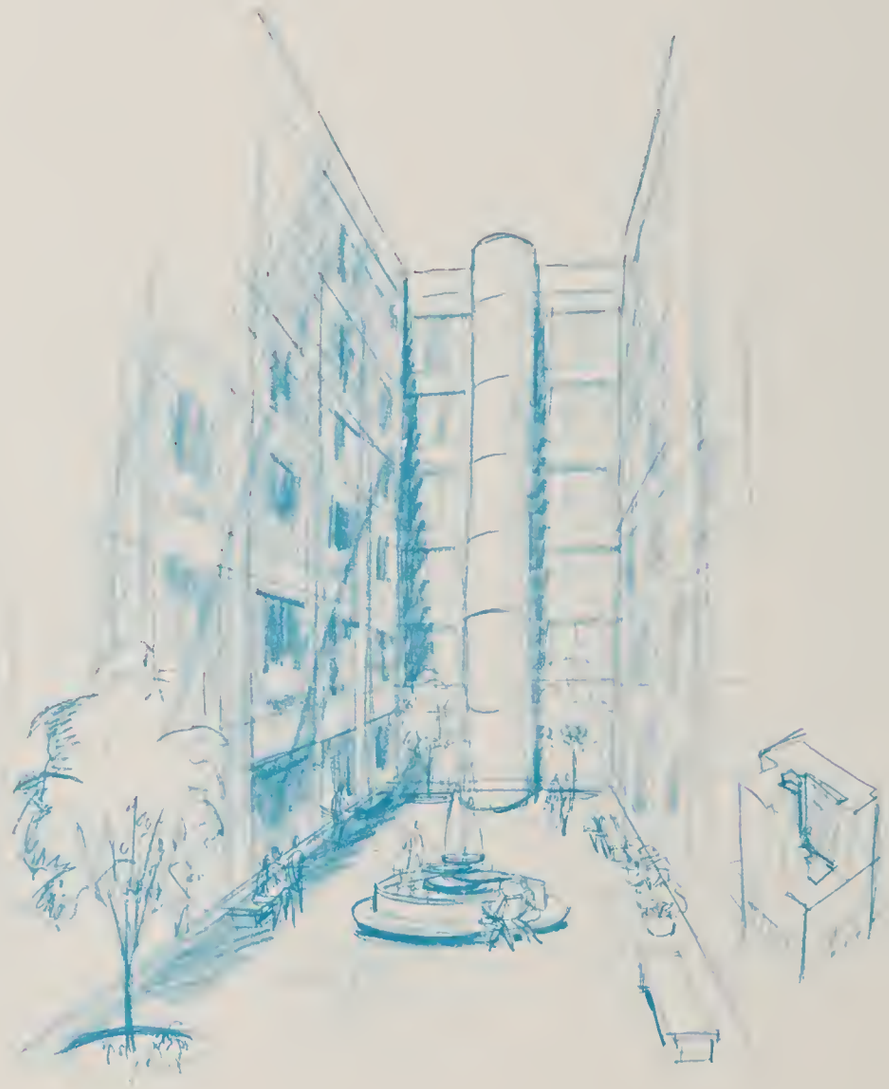
Ingenious use of light is one of the hallmarks of design for which the Infirmary's architects are known; the firm of Walk Jones, Mah and Jones Architects, Inc., of Memphis, Tennessee.

To insure that patient rooms also will have a restful atmosphere of quietude, similar attention has been paid to noise control. Double-purpose insulation and carpeting, proved to be more serviceable than other forms of flooring, will virtually sound-proof patient rooms.

Geared to Change

Long months of mutual planning by the Infirmary's medical and administrative staff and architects have made certain the new building will adapt to the radical changes in medicine that are sure to come. There is every assurance that the capability is built in to make immediate use of new concepts for patient care, for educating residents and nurses, and for scientific investigation.

One such concept already is destined to become reality. It is the Stone Retina Pavilion, a center that will occupy an entire floor, exclusively for the advance-



Gift of $1.5 million for Stone Retina Pavilion in the new Infirmary is announced at site preparation ceremonies. Left to right: Trustee Mrs. Richard Cary Curtiss; Ladies Visiting Committee Chairman Mrs. Robert C. Meisel; Hospital Corporation President William L. Claflin, III; Treasurer Horace W. Frost; MEEI Director Charles Wood; Trustee Leverett Saltonstall, and W. Clement Stone, philanthropist, honorary trustee and president of Combined Insurance Company of America.

ment of care of patients with disorders of the retina and other vital tissue at the back of the eye.

The Pavilion was made possible through the generous $1.5 million gift of the W. Clement and Jessie V. Stone Foundation. Mr. Stone, a Chicago insurance magnate and philanthropist, is an honorary trustee of the Infirmary.

In the Pavilion an important blending of treatment, training and research will take place. The purpose is to hasten the translation of research results into more effective treatment.

From a longer-range point of view, it also is anticipated that the work of the Pavilion will lead to better understanding of brain function. To unravel complex brain function may be more feasible by approaching it through the retina for two reasons: The retina actually is a flat sheet of brain placed at the back of the eye somewhat like a television antenna on the roof of a house; and since it is more accessible than the brain it is easier to investigate.

Other Notable Features

Overall the new building has many other features, impressive both for their immediate practicality and as an investment against the future. Among them are:

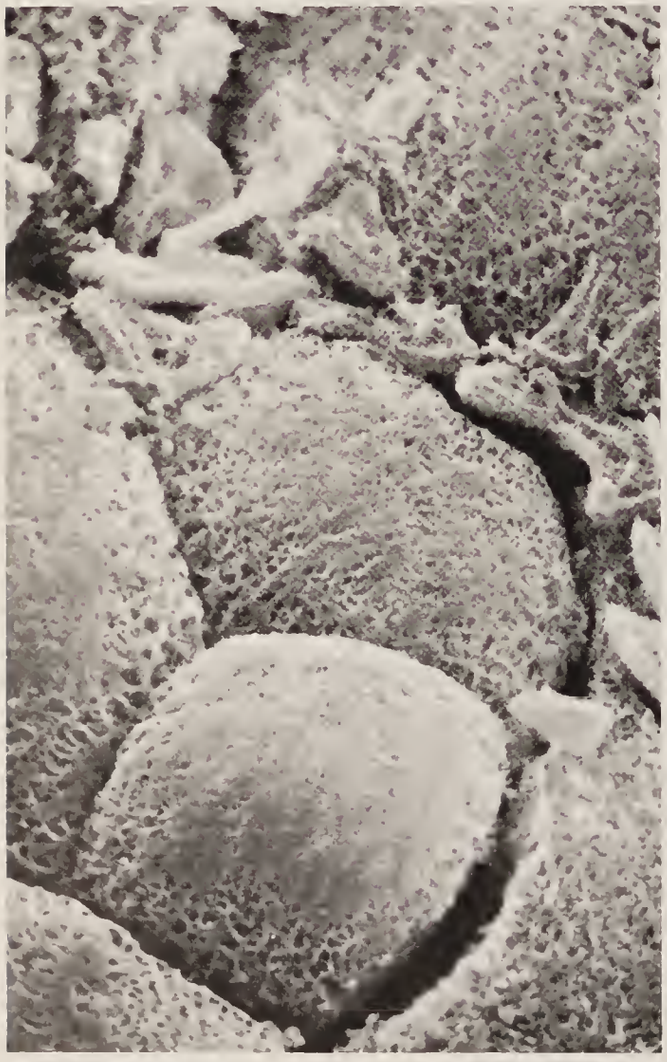
- A 20-operating room complex of surgical suites with adjacent recovery rooms. In these a highly modern "air-fall" ventilation system will cascade germ-free air down over patients and operating room personnel. This will markedly decrease the risk of surgical infection.
- Pneumatic systems for the removal of trash, soiled linens and the delivery of supplies, will net real savings in time and costs while eliminating delay.
- An electronic monitoring system will track the smooth operation of motorized equipment and trigger automatic shutoffs to minimize breakdowns and expensive repair.
- Heating, plumbing, ventilation systems and power generators are to be as vibration-free as possible. This is to eliminate interference with super-delicate surgery.
- An amphitheatre for educational and scientific presentations will seat 300 people; a long-needed facility made possible through the Meltzer Memorial Fund. Nearby will be an invaluable 30,000 volume library.
- Without question the most architecturally interesting facet of the new building is the creation in its very midst of "an inner core of light." All the upper floors will be squared around a six-level deep, open well.

In this way every patient room will have a pleasant view. Outer rooms will overlook the Charles River, the harbor and Beacon Hill, while inner rooms will overlook a terrace at the base of the well-of-light.

Deepening Problems

Although medical progress truly offers more hope and more help to people threatened by blindness, deafness or muteness today, tragically their numbers are increasing. This is true not only in the less fortunate areas of the world, but regrettably right here in the medically sophisticated United States.

Few people are aware, for example, that the frequency of blindness is rising at a rate nearly twice that of the general population. And the trend is accelerating, due in part to the improved survival rate of people with hereditary disorders like diabetes, and the elderly with the chronic disorders to which they are prey. Diabetes, for instance, now afflicts 4.4 million Americans and is the second leading cause of blindness in the United States. The prediction is, moreover, that diabetes may become the primary cause of blindness within the next decade if the incidence of this disorder continues to climb as expected.



Rare three-dimensional photo, taken at 10,000 magnification, of the "seeing" cells of the eye, the retina.

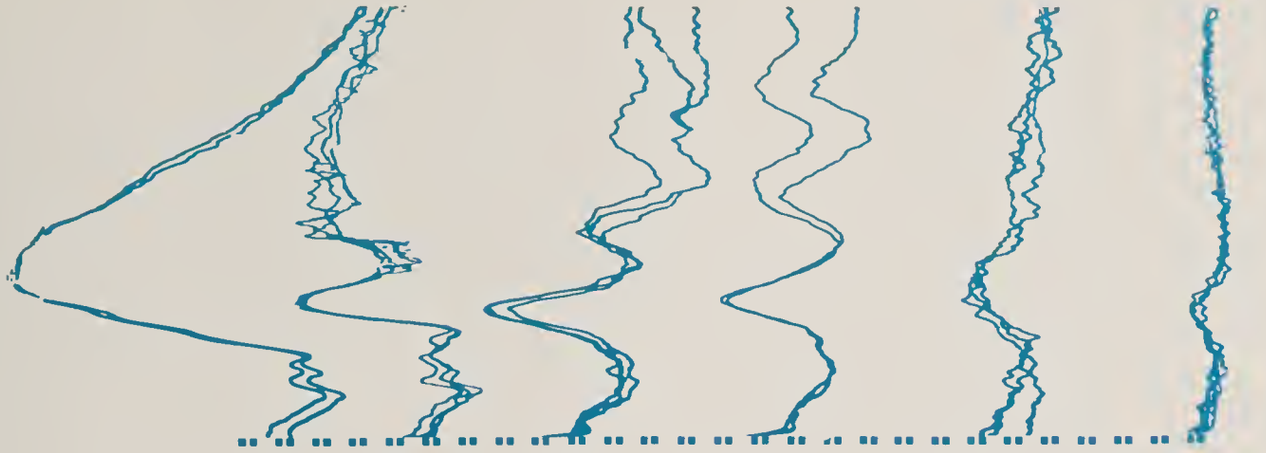
Cross section of the cochlea, the cone-shaped labyrinth that is the hearing apparatus of the inner ear.

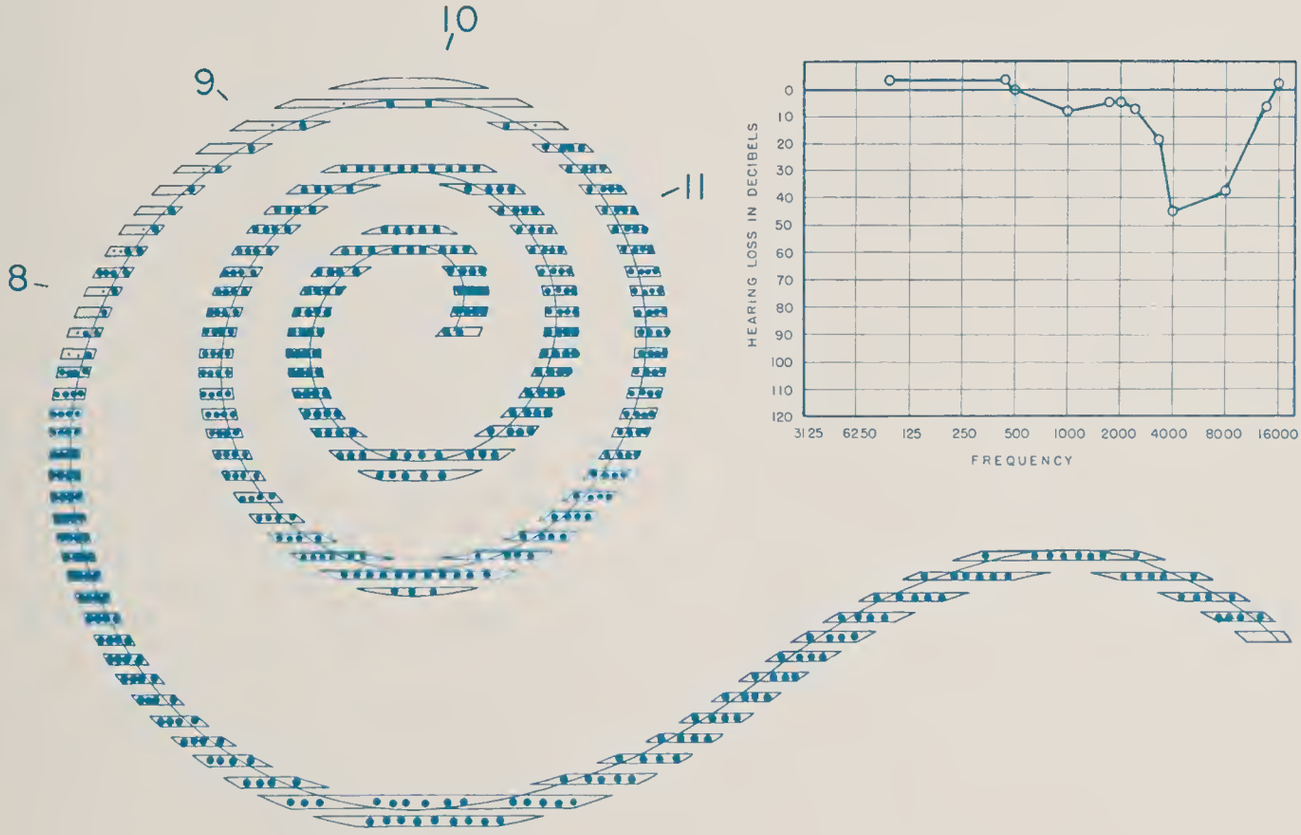
Even the statistics of the day are sombre:

- One person loses his sight every 20 minutes, and approximately 42,000 of these new cases occur each year in the United States. There now are 4,000,000 blind people in the world, one million of them in this country alone.
- More than 250,000 Americans are profoundly deaf within a total of 6,000,000 who suffer severely impaired hearing.
- Of every 10,000 children in the United States, 12 are totally deaf and 150 to 300 have severe hearing loss. Among American adults, hearing loss affects more than 400 of every 10,000.
- Some 6,000 Americans each year are diagnosed to have cancer of the larynx, the voice box. Nearly 25,000 of them have undergone surgical removal of the voice box; the majority are able to speak again by learning esophageal speech. Many others suffer laryngeal injuries, particularly due to auto accidents. An important modification in reparative throat surgery developed recently at the Infirmary can restore such patients to natural speech.

Brightening Medical Promise

In conscience the Infirmary in no way can neglect its duty to do the utmost to prevent, alleviate or cure these conditions. For they not only may deprive people of a precious vital sense, but also may rob them of the dignity of being independent and self-supporting.





TOP: Tracings of electric impulse response of the retina to red light stimuli. Patterns indicate normal vision at left, progressing to blindness at right.

BOTTOM: Electronic record of nerve responses to sound stimuli in cochlea of the ear.

It is in that context that the challenge to the Infirmary is cast — an awareness of the deepening of eye, ear, nose and throat medical problems at a time of brightening medical promise.

The Infirmary has long known that the best hope for improved treatment and eventually the cure of these life-altering conditions, lies in a close union of treatment, training and research. For it is axiomatic that where teaching and research flourish, medical care of the patient will be of the highest order. Important as past accomplishments at the Infirmary have been, surely they will be dwarfed by the achievements to come.

Naturally we take pride in the medical gains already made. And we're inspired to extend the work of those who have gone before.

Our service to those afflicted with disabling and distressing disorders of the eye, ear, nose and throat has been a noteworthy performance that must be maintained and furthered.

We also treasure our academic excellence. As an affiliate of Harvard Medical School we share with it the responsibility for supplying the community at large, the nation and the world with doctors superbly trained in our medical and surgical specialties.

As a renowned research center we continue to push forward the frontiers of knowledge, confident that our future discoveries will mean that sight, hearing and speech can be preserved or restored to an ever greater extent.

The provident and visionary men who founded and guided the infant Infirmary knew that merely to be well-born was not enough. To fulfill its mission to its sorely afflicted patients, the Infirmary had to grow and thrive, pacing itself always at the forefront of its field.

That proviso is fully as true today. To stand still is to fall behind. So the Infirmary must strive anew, not just to stay ahead, but to continue to pave the way for others.

Humble though its beginnings were, the foundation upon which the Infirmary was laid has proved its soundness. Today the Infirmary is pre-eminent in treatment, training and research, a worldwide center of unparalleled calibre. No institution of its combined specialties has given more to the nation and the world.

In the fullest sense, the Massachusetts Eye and Ear Infirmary is a noble idea that has endured. Its story is but begun.

Front Cover Photo
Courtesy of *Clinical Trends*
Burroughs, Welcome and Company

The able assistance of the Infirmary's archivist and librarian, Charles Snyder, in the preparation of material for this brochure is gratefully acknowledged. The Infirmary's library is world known and a recognized national center for the literature of ophthalmology and otolaryngology.

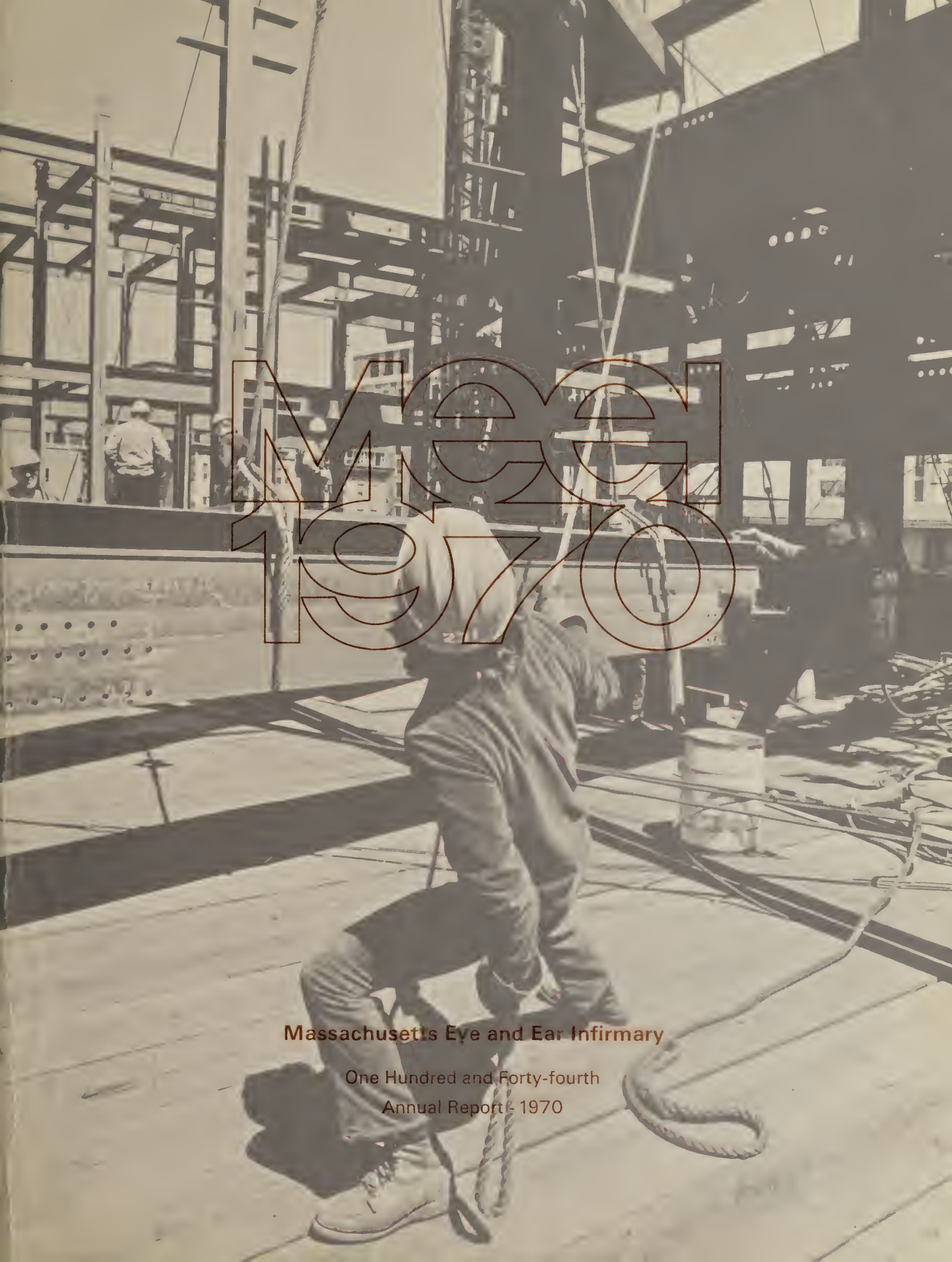
FORM OF BEQUEST

I give to the Massachusetts Eye and Ear Infirmary, a charitable organization organized under the laws of Massachusetts, and situated at Boston, Massachusetts,

.....Dollars.

Massachusetts Eye and Ear Infirmary
243 Charles Street
Boston, Massachusetts 02114

Meet
1970



Massachusetts Eye and Ear Infirmary

One Hundred and Forty-fourth
Annual Report - 1970

Massachusetts Eye and Ear Infirmary

One Hundred and Forty-fourth

Annual Report - 1970

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The children . . . the children . . . the Infirmary's most cherished patients.

In 1970, more than 1,400 youngsters from the age of three weeks to sixteen years old came in for treatment and surgery for the whole array of disorders that beset the young, from routine tonsillectomies to esoteric neurological problems.

They are the greatest challenge and the greatest satisfaction.

And they remain the most significant reason for our pursuit of new knowledge, new remedies, and new hope.

Renewal must be ours now. Their future is at stake.

In the life of an institution, as with people, some years stand out more prominently than others.

Surely, 1970 was such a year. For it was and forever will be the year of renewal for the Infirmary.

With the signing on March 17, for construction of our new building, a new day, a new time, in effect a new life, was officially incorporated into the grand plan: The dream for the first time took on contractual certainty.

Now as steel and concrete give substance to that future, the long months when it was only a 'paper' plan already have begun to fade from memory. Yet, merely a year ago we still were waiting for the drama to begin.

Looking back, it's fascinating to recall how exciting it was to see remnants of the old facility begin to come down . . . to see space out back open up . . . to discover our past in the massive old foundation, granite block and thick timber that for 70 years silently supported the Infirmary above.

Since those beams were set in place just think of the teeming life that has passed through our corridors: The great specialty medicine and surgery that has been practiced; the research undertaken; the medical lessons taught and learned; the jobs performed; the people who have come and gone.

As the big wheel of change now turns more and more rapidly, the smaller — but no less important — wheels of our daily enterprise here at the Infirmary also must keep turning without interruption. And they do. Incredibly, with all the commotion of building going on, we actually continue to make progress.

To mention but a few innovations during 1970, let me note:

- Our ambulatory services extended clinic times for patients and initiated a specific appointment system.
- Our nursing department introduced a permanent Nursing Care Plan System and gave fresh emphasis to the highly beneficial practice of team nursing.
- And beyond all else, our primary service . . . the provision of individualized specialty care to patients with disorders of the eye, ear, nose or throat . . . saw important advances. For example, we stepped up our diagnostic capabilities by opening new units of remarkable sophistication and laid the groundwork for others. Our programs for training residents in our specialties were adjusted to give more emphasis to emergency medicine. Our research efforts took on even stronger clinical overtones, more direct application to patient care. And the quality of our work continued to be honored by prestigious awards by professional societies.

These improvements, and others, will be acknowledged in greater detail in subsequent pages of this report. Highlights of our activities, depicted elsewhere in this document, testify to the unflagging resourcefulness of our staff in every department.

The thought persists as material for this report has been reviewed, that this is the last time we shall be speaking in terms of finally turning the corner — from a 'proposed' new Infirmary to one that is reality.

By the time of our next annual report, we shall be able to stand in the shadow of a new Infirmary, that will at least be complete outwardly. Our frame of mind, expectedly, will be quite different. Our mood will be geared toward the finishing date, anticipation of moving in and all the prospects of the new arrangements for our patients and ourselves.

The year 1970 remains singular, then. It, indeed, is the hinge year in which we began to close the door on one phase of life for the Infirmary, while firmly and irreversibly opening the gate to an era of new opportunity for this deservedly famed specialty hospital. The fullness of our renewal is upon us.

Charles Wood

Charles T. Wood
Director

Nearly all patients admitted to the Infirmary undergo surgery . . . highly specialized surgery.

Here, the ultimate in surgery sometimes is the patient's only hope for even partial recovery of sight, speech or hearing.

Whenever practicable, educational use also is made of surgery so that our specialties and patients will be assured new practitioners.

Steadily, too, newer surgical techniques and instruments are developed, refined and brought as early as is reasonable into regular usage.

In 1970 more than 11,150 operations were performed.

1. The exquisite delicacy of the eye sometimes requires heroic surgical techniques to coax gossamer-thin inner membranes back into place. Dramatically, an upside-down operating table is used (as shown) in certain highly complicated retina disorders so that even the force of gravity comes into play to assist the surgeon's efforts.

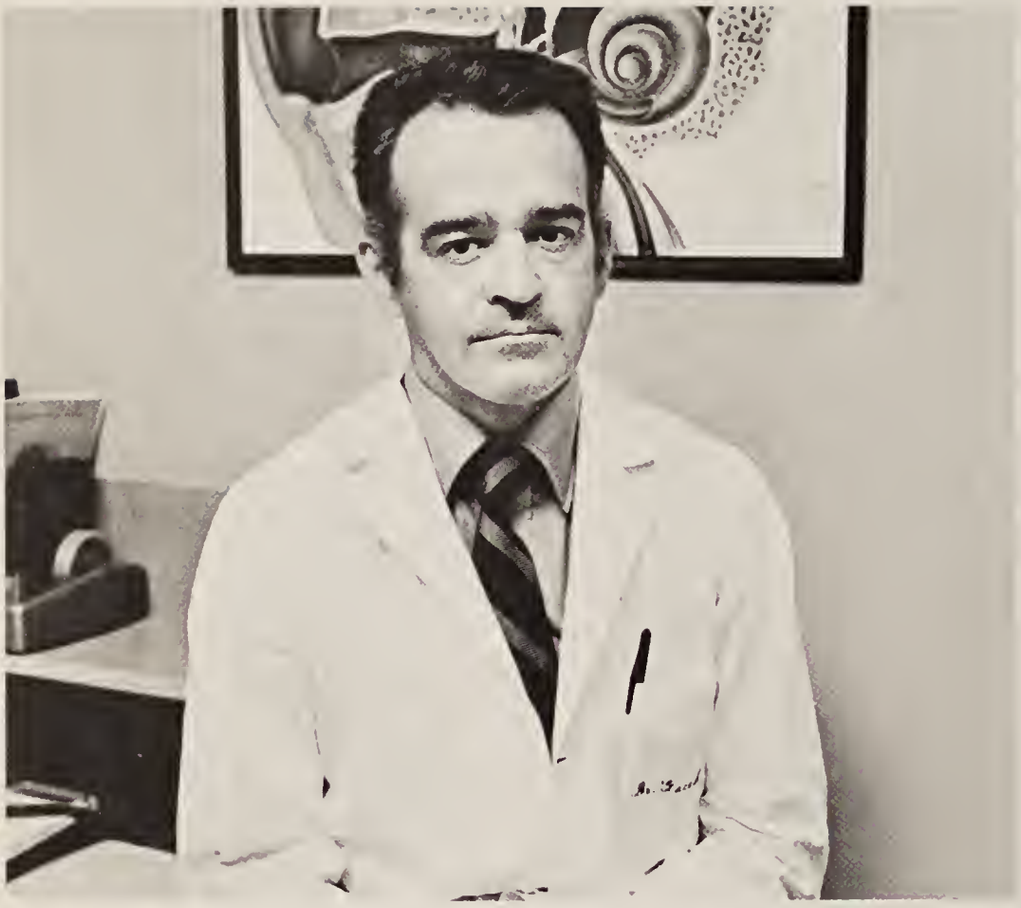
(Far Left)

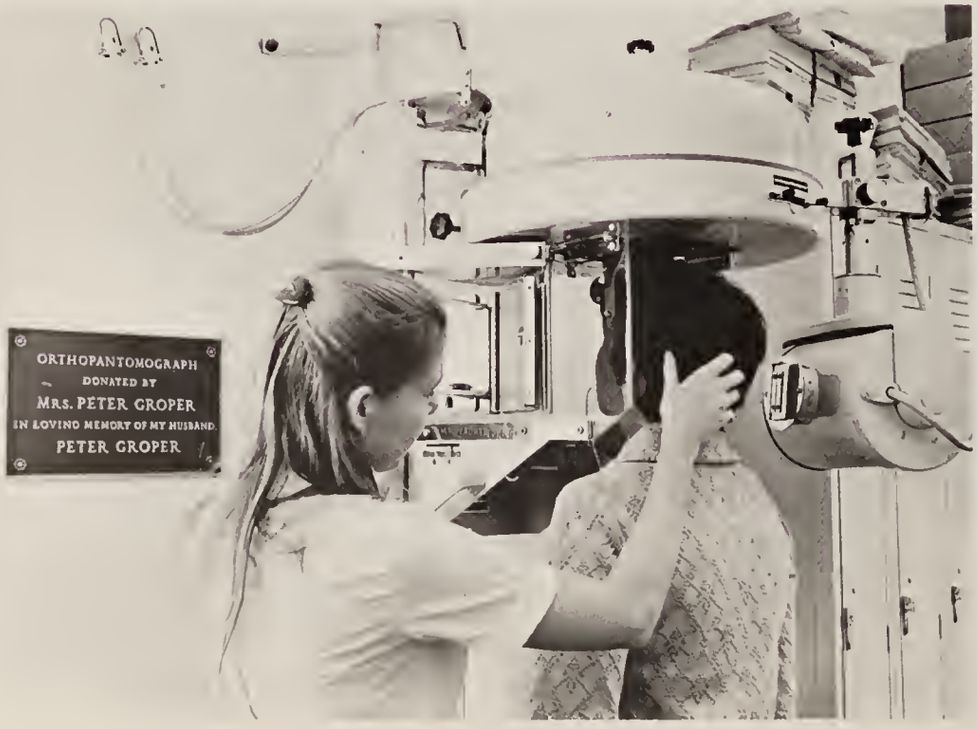
2. Microsurgery of the ear beautifully lends itself to teaching. Here, twin side-viewers permit ENT residents to see the same magnified field of surgery as does the surgeon himself.

(Above)

3. Cryosurgery, which utilizes the phenomenon of ultracold surgically, has been masterfully developed at the Infirmary, parparticularly in throat surgery.

(Left)

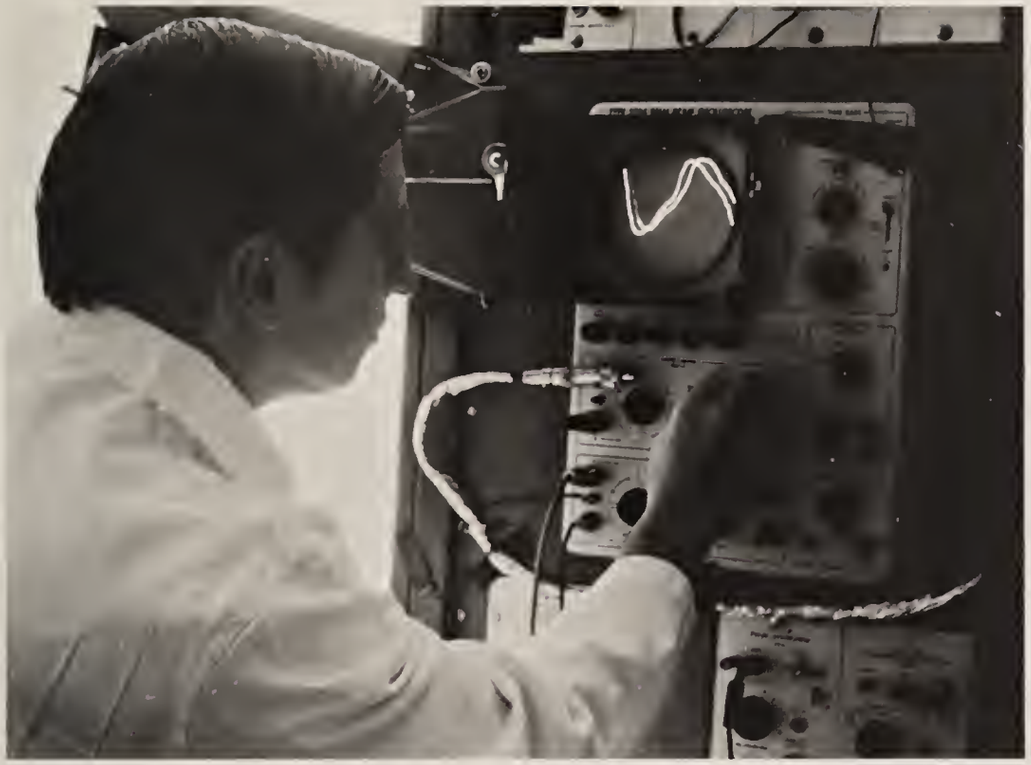




The coveted national research prize, the Edmund Prince Fowler Award for the most outstanding thesis presented to the Triological Society (the prestigious professional society for ENT specialists) went to Dr. Richard Gacek, assistant surgeon in otolaryngology at the Infirmary.

The work so deservedly honored was carried out by Dr. Gacek at the Infirmary and dealt with the special nerve pathways within the brain that relate to neural communications — in effect, a "balancing" system — between the muscles of the eye and the ear.

In radiology, a plaque was installed to commemorate the gift of an invaluable new piece of equipment, an Orthopantomograph. Donated by Mrs. Peter Groper and her daughter Mrs. Muriel Fine, both of Boston, in memory of their husband and father, respectively, the machine is an important diagnostic x-ray aid in determining the extent of facial injuries, tumors and infections. It provides a panoramic view of the face from chin to eye in a single film and within a span of seconds. Further, it affords great comfort to patients who need not be moved repeatedly as before, while they are in pain.



A whole new service, focused on a severe and usually blinding eye disorder affecting the retina, opened in new quarters within the Infirmary on January 1, 1970.

Technically named electroretinography, the ERG center applies that technique — similar to the electrocardiogram — to measure the electric response of the retina (the seeing portion of the eye) to light. Abnormal responses are vital clues to the inherited eye disorder, retinitis pigmentosa. Previously, diagnosis could only be made in advanced stages. ERG provides early diagnosis and a means of monitoring the progress of the disorder.

The ERG service, directed by Dr. Eliot Berson, originally opened in 1968 as a satellite of the Infirmary at Children's Hospital Medical Center. Now, in the Infirmary's main building, the service is examining six or more patients per week; one of the few centers in the country where ERG testing is possible.

Though there is no known remedy for the condition, recently Dr. Berson began trials with a treatment that may preserve vision in one eye, thereby doubling the patient's visual life.

In June of 1970, Dr. Berson also established a related research laboratory in the Department of Ophthalmology for further study of retinitis pigmentosa and allied diseases. Presently the lab is located in the Harvard School of Public Health.

Signs of things to come are in evidence everywhere at the Infirmary.

In the lobby, under glass . . . the way precious things are protected . . . stands a scale model of the Infirmary just as it will look when the new building is complete.

And in a nearby loft stood a walk-in model of the room each patient will have in the very near future. Impressive in appearance, replete with wood paneling, thermopaned wall-windows and carpeting, each room will be fitted with attractive features for the patient. In reality, however, the room has been designed primarily for efficient, effective, time and cost-saving specialty care. Ingenious lighting and a console that puts all automatic services . . . radio, TV, telephone, nurse call system and monitoring devices . . . at a patient's fingertips, are unique to the design.

It was an historic moment, deserving of photo replay. This is the way it was that memorable day, March 17, 1970, when the old but binding custom of "signing" testified to the Infirmary's commitment to build anew. (Left to right, Infirmary corporation president William H. Claflin, III, of Belmont; Vappi & Company president C. Vincent Vappi of Milton; trustee chairman Henry Hixon Meyer of Belmont; and (standing) Vappi project manager Robert J. Robertson of Westwood; MEEI director Charles T. Wood of Stoneham; and Aetna Casualty Insurance attorney Michael H. Bonacorso of Arlington.

Financial Statements and Statistics

Trustees
(Dates indicate year of appointment)

Hon. Leverett Saltonstall	1925
Walter H. Trumbull	1929
Robert F. Bradford	1934
William A. Parker	1935
Henry Hixon Meyer	1937
Mrs. Richard Cary Curtis	1940
Horace W. Frost	1940
Hon. Edmund V. Keville	1942
Frederick Winthrop	1943
Mrs. Sullivan A. Sargent	1945
William H. Claflin, III	1947
Mrs. John W. Farley	1948
The Rev. Robert G. Metters	1948
August R. Meyer	1948
Miss Amelia Peabody	1948
Nathaniel Faxon, M.D.	1949
Francis W. Hatch, Jr.	1951
George L. Pew	1951
Howland S. Warren	1951
Melville Chapin	1951
Henry K. Porter	1951
George A. McLaughlin	1952
Mrs. Francis T. Hunter [1]	1953
Mrs. Varaztad H. Kazanjian	1953
Richard P. Chapman	1955
William Ehrlich	1955
Richard Harte[2]	1955
Weston Howland, Jr.	1955
William L. Saltonstall	1957
Leslie Soule	1957
Thomas B. Frost	1963
John S. Howe	1963
Frederick H. Lovejoy	1963
Thomas Allsop	1963
Frank S. Christian	1965
George M. Lovejoy, Jr.	1965
Mrs. John Lowell	1965
Frederick C. Rozelle, Jr.	1965
George C. Seybolt[3]	1965
Francis S. Hill	1966
Robert Bacon	1966
James I. Summers	1966
Leo F. Daley	1966
Paul A. Chandler, M.D.	1967
Edwin B. Dunphy, M.D.	1967
Mrs. Bartlett Harwood	1967
Henry G. Lapham	1967
John M. Lord	1967
LeRoy A. Schall, M.D.	1967
William F. Spang	1967
John I. Taylor	1967
Monte J. Wallace	1967
Colin McA. Cunningham	1968
W. Clement Stone — *honorary*	1968
Richard W. Young, Ph.D.	1969
Ephron Catlin	1970
Mrs. Frederick S. Moseley	1970
Mrs. Frederick R. H. Witherby	1970

[1] deceased November 9, 1970
[2] deceased March 16, 1970
[3] resigned December 1, 1970

Board of Managers

Henry Hixon Meyer, *Chairman*
William H. Claflin, III, *President*
Horace W. Frost, *Treasurer*
George M. Lovejoy, Jr., *Secretary*

Melville Chapin
Frank S. Christian
*Ernest W. Cook, Ph.D.
Mrs. Richard Cary Curtis
William A. Parker
Henry K. Porter
*John Ryan
James I. Summers
Walter H. Trumbull
Frederick Winthrop

*Appointed by the Commonwealth
(all appointments designated through December 31, 1970)

Administration

Director
Charles T. Wood

Associate Director
Raymond W. Lyons

Assistant Director
James R. Hamill

Assistant Director
Samuel S. Drury

Associate Controller
George F. Waters

Director of Personnel
William F. Hayward

Director of Public Relations
Loretta McLaughlin

Director of Nursing Services
Barbara Czechowski, R.N.

Director of Social Services
Madeline Shipsey

Chief Admitting Officer
Ruth Dorfman, R.N.

Building Services Director
F. Malcolm Watts

Dietary Services Director
Herbert Kirshnit

Maintenance Services Director
Robert Marshall

Purchasing and Stores Director
Lehan Power

Administrative Assistant, Nursing Services
Ruth Straitiff

Administrative Supervisor of Ambulatory Services
Edward J. Stockman, Jr.

Chief Audiologist
Rhoda Kimmel

Chief Clinics Admitting Officer
Barbara S. Orman

Chief Scheduling Officer
Rose Rich

Coordinator of Nursing Education
Irene Cullin, R.N.

Data Processing Manager
Paul Peloquin

Librarian and Archivist
Charles Snyder

Optical Shop Manager
Vincent H. Farley

Patients Accounts Director
Gerald Clinton

Volunteer Director
Rosanne Ring

Ladies Visiting Committee

Executive Committee

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Chairman
Mrs. John Lowell
First Vice Chairman
Mrs. Henry Lyman, Jr.
Second Vice Chairman
Mrs. John B. Eliot
Recording Secretary
Mrs. Calvin King
Corresponding Secretary
Mrs. Edgar H. Kent
Treasurer
Mrs. William A. Slade, Jr.
Past Chairman
Mrs. Donald Bienfang
Chairman of Distaffers

Mrs. Varaztad H. Kazanjian
Mrs. Herbert W. Kelley
Miss Mary A. Redman
Mrs. James I. Summers

Members

Mrs. Henry F. Allen
Mrs. Manning Barry
Mrs. Maurice Berlin
Mrs. Yale Berry
Mrs. Arlie V. Bock
Mrs. Harry E. Braconier
Mrs. Joseph M. Carey
Mrs. Edwin J. Carr
Mrs. John M. Carroll, III
Mrs. Walter J. E. Carroll
Mrs. Malcolm B. Carsley
Mrs. Thomas Cavanaugh
Mrs. Paul A. Chandler
Mrs. Richard B. Chapman
Mrs. Harry Chisholm
Mrs. Julian F. Chisholm
Mrs. Nathaniel D. Clapp
Mrs. Joseph M. Clough
Mrs. David G. Cogan
Mrs. Thomas Cronin
Mrs. Colin McA. Cunningham
Miss Winifred Cunningham
*Mrs. Richard Cary Curtis
Mrs. Leo F. Daley
Mrs. S. Hopkins Damon
Mrs. Benjamin C. Davis
Mrs. Charles G. Davis
Mrs. Livingston Davis
Mrs. David D. Donaldson
Mrs. Weld Douglass
Mrs. Edgar J. Driscoll, Jr.
Mrs. Edwin B. Dunphy
Mrs. John B. Eliot
Mrs. John W. Farley
Mrs. Maxwell Fish
Mrs. Richard R. Gacek
Mrs. Harold S. Geneen
Mrs. Robert L. Goodale
Miss Janet L. Gorton
Mrs. W. Morton Grant
Mrs. Trygve Gundersen
Mrs. Charles Harsh
Mrs. Bartlett Harwood
Mrs. Ralph Hinckley
Mrs. Valentine Hollingsworth
Mrs. Edgar M. Holmes
*Mrs. Francis T. Hunter
Mrs. Alfred L. Hurst
Mrs. J. Carter Inches
Mrs. Charles J. Innes
Mrs. Carl C. Johnson
Mrs. Roy A. Johnson
*Mrs. Varaztad H. Kazanjian
Mrs. Victor H. Kazanjian
Mrs. Herbert W. Kelley
Mrs. Edgar H. Kent
Mrs. Calvin A. King
Mrs. Robert E. Klotz
Mrs. Clarence E. Knapp
Mrs. Charles A. Lane
Mrs. Robert Lofgren
Mrs. John Lowell
Mrs. Henry Lyman, Jr.
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Mrs. Alexander S. Macmillan, Jr.
Mrs. David B. McClusky
Mrs. J. Wallace McMeel
Mrs. Robert C. Meisel
Mrs. Henry D. Minot
Mrs. G. Gardiner Monks
Mrs. William W. Montgomery
Mrs. Noel Morss
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Mrs. Stephen P. Mugar
Mrs. Dorothy Newhook
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Mrs. Grafton B. Perkins
Mrs. Henri Prunaret
Miss Mary A. Redman
Mrs. Franklin A. Reece
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Mrs. Aram Roopenian
Mrs. Perry Rosenthal
Mrs. Nathan Rothenberg
Mrs. Baruch J. Sachs
Mrs. Benjamin Sachs
Mrs. William L. Saltonstall
Mrs. Ernest J. Sargeant
*Mrs. Sullivan A. Sargent
Mrs. Richard E. Savory
Mrs. Charles L. Schepens
Mrs. Harold F. Schuknecht
Mrs. Alfred W. Scott
Mrs. Henry R. Scott
Mrs. Samuel Simons
*Mrs. William A. Slade, Jr.
Mrs. Albert E. Sloane
Mrs. Reginald H. Smith
Mrs. Taylor R. Smith
Mrs. Leslie Soule
Mrs. George Stephenson
Mrs. James I. Summers
Mrs. William L. Taggert
Mrs. Thomas C. Thacher
Mrs. John E. Thayer
Mrs. Robert Truesdale
Mrs. Lyon Weyburn
Mrs. Roy R. Wheeler
Mrs. Henry E. Wile
Mrs. Andrew N. Winslow, Jr.
Mrs. Stewart C. Woodworth

*Mrs. Harold Peabody,
Honorary Member

*Past Chairman

Associate Members

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Mrs. Richard P. Breed, Jr.
Mr. and Mrs. Elliot W. Brown
Mr. and Mrs. Joseph J. Byrne
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Mrs. Harper Cannon
Mrs. Richard E. Carter
Mrs. Mortimer L. Cashman
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Mrs. Tarrant Cutler
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Mrs. Philip Shea
Mr. and Mrs. Andre R. Sigourney
Mrs. Winthrop E. Sears
Mrs. C. Fred Smith, Jr.
Mr. and Mrs. Fred L. Timmins
Mrs. Gerard B. Townsend
Mrs. J. Van Heyst
Mr. and Mrs. Harvey Wachtel
Mrs. Lewis L. Wadsworth
Mrs. Kenneth D. Wakefield
Mr. and Mrs. Thomas J. Walsh
Miss Agnes Wheeler
Mrs. Evelyn G. Whiton
Mrs. Royal C. Wilson
Mrs. Sidney C. Wiggin

Balance Sheet
September 30, 1970

Assets		
Cash		$ 1,081,453
Investments — at cost		
Cash in savings bank accounts	$ 747,454	
Marketable securities (quoted market value $15,247,140)	11,316,322	12,063,776
Accounts receivable	1,583,658	
Less allowance for doubtful receivables	113,174	1,470,484
Inventories — at lower of cost (first-in, first-out method) or market		67,527
Prepaid expenses		27,669
Unamortized pension costs		74,618
Plant and equipment — at cost		
Buildings	3,722,254	
Furniture, fixtures and equipment	825,990	
	4,548,244	
Less accumulated depreciation	2,144,402	
	2,403,842	
Land	4,701	2,408,543
Construction in progress		2,816,801
		$20,010,871
Liabilities and Fund Balances		
Advances from patients		$ 11,031
Accounts payable		420,413
Payroll taxes and other withholdings payable		113,941
Accrued payroll, payroll taxes and other expenses		134,788
Reserves for contractual adjustments and other contingencies (Note A)		114,540
Fund balances		
Temporary funds	836,023	
Special funds	2,822	
Special purpose funds	904,685	
	1,743,530	
Unexpended restricted income of permanent funds	377,418	
General Fund	3,987,597	
General Pension Reserve (Note B)	1,553,797	
Permanent funds — income restricted	1,621,778	
Permanent funds — income unrestricted	2,850,985	
Undistributed security gains on pooled investments	1,019,525	
Funds invested in plant	2,408,543	
Plant Depreciation Fund	593,014	
Building Fund	3,059,971	19,216,158
		$20,010,871

The accompanying notes are an integral part of this statement.

Condensed Income Account
September 30, 1970

Gross Charges for Services to Patients		$ 6,818,905
Adjustments to Gross Charges:		
Allowances to patients	$ 168,232	
Allowances to contracting agencies	96,014	
Allowances to Blue Cross	35,092	
Provision for uncollectible accounts	183,980	483,318
Net Revenue from Services to patients		$ 6,335,587
Other Operating Revenue		280,317
Total Operating Revenue		$ 6,615,904
Hospital Operating Expenses (including provision for depreciation — $170,337)		$ 7,088,135
Hospital Operating Loss		$ 472,231
Donated Income		
United Community Services	$ 27,584	
Estates of Elisha V. Ashton, G. Gorham Peters, Samuel C. Howes, and others	26,623	54,207
Hospital Net Loss		$ 418,024

Summary of Investment Income
September 30, 1970

Investment Income Applied to Offset Hospital Net Loss		$418,024
Investment Income Transferred to General Fund		101,000
	Total	$519,024

Board of Managers
Massachusetts Eye and Ear Infirmary

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY (a Massachusetts corporation, not for profit) as of September 30, 1970, and the related statements of income and changes in fund balances for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related statements of income and changes in fund balances present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1970, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Alexander Grant & Company

Boston, Massachusetts
January 31, 1971

Note A — Reserves for Contractual Adjustments and Other Contingencies

The Infirmary renders patient care services under contracts with third party agencies, at provisional rates which are subject to adjustment after audit. It also engages in research activities under contracts with U. S. Government agencies, the reimbursed costs of which are subject to post-performance review and adjustment. For the purpose of providing for such possible adjustments, the Infirmary has established reserves aggregating $90,356. In addition, the Infirmary set aside amounts recovered from U. S. Government research grants for workmen's compensation liability assumed by the Infirmary. The aggregate of such recoveries to September 30, 1970 amounted to $24,184.

Note B — Pension Plan

Under the terms of a pension plan adopted September 5, 1955, as amended effective October 1, 1966, the Infirmary established a General Pension Reserve for the purpose of funding the liability for pension payments to eligible employees upon retirement.

The Infirmary's consulting actuaries reported the initial accrued pension liability remaining unfunded as of October 1, 1968, the most recent date of actuarial valuation to be $311,059.

The total pension expense for the year ended September 30, 1970 was $184,092, which included $7,796 of direct pensions to retired employees not covered by the pension plan and a contribution to the General Pension Reserve for pension cost accrued, including amortization of additional accrued liability over the expected future active service of covered employees, in the amount of $176,296.

STATISTICAL HIGHLIGHTS

In-Patient Hospital (178 Beds)

	1970
ADMISSIONS:	
Eye Patients	6,188
E.N.T. Patients	4,973
Total Admissions	11,161
OPERATIONS:	
By Eye House Staff	1,526
By Eye Attending Staff	5,031
Total Eye Operations	6,557
By E.N.T. House Staff	1,259
By E.N.T. Attending Staff	3,257
Total E.N.T. Operations	4,516
Total Operations	11,073
DISCHARGES:	11,157
Death	14
Autopsies	57%
PATIENT DAYS	57,141
AVERAGE PATIENT CENSUS	157
AVERAGE LENGTH OF STAY	5.12 days
BED UTILIZATION	88%
AVERAGE PATIENT COST PER DAY	$84.64

Out-Patient Department

	1970
EYE CLINIC	
Total Eye Visits	58,839
E.N.T. CLINIC	
Total E.N.T. Visits	23,399
Total O.P.D. Visits	82,238

Emergency Ward

Eye Cases	15,508
E.N.T. Cases	10,843
Total	26,351

Minor Surgery

Eye Cases	1,675
E.N.T. Cases	1,352
Total	3,027

Committees

Executive

William H. Claflin, III, *Chairman*
Henry Hixon Meyer
Horace W. Frost
Melville Chapin
George M. Lovejoy, Jr.
George A. McLaughlin
Mrs. Robert Meisel
Harold F. Schuknecht, M.D.
Henry F. Allen, M.D.
Charles T. Wood, *Secretary*

Finance

Henry Hixon Meyer
Horace W. Frost
William A. Parker
William H. Claflin, III
Thomas B. Frost

Building

Henry Hixon Meyer
Horace W. Frost
William H. Claflin, III
Frederick H. Lovejoy
George M. Lovejoy, Jr.
Henry F. Allen, M.D.
Harold F. Schuknecht, M.D.
Charles T. Wood
Samuel S. Drury, *Secretary*

Medical Staff Executive

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Alfred W. Scott, M.D.
Daniel Miller, M.D.
Robert E. Klotz, M.D.
Henry Hixon Meyer
Henry F. Allen, M.D.
Harold F. Schuknecht, M.D.
Charles T. Wood

Research

Melville Chapin, *Chairman*
Samuel S. Drury, *Executive Secretary*
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Walter A. Rosenblith, Ing. Rad.
Ralph G. Meader, Ph.D.
Charles T. Wood
Richard Young, Ph.D.
Henry F. Allen, M.D.
David G. Cogan, M.D.
Harold F. Schuknecht, M.D.
John W. Irwin, M.D.
Nelson Y. S. Kiang, Ph.D.
Richard J. Simmons, M.D.

Subcommittee on Human Studies

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W. Morton Grant, M.D.
Charles D. J. Regan, M.D.
Harold F. Schuknecht, M.D.
Herbert Silverstein, M.D.
Ralph G. Meader, Ph.D.
Max L. Goodman, M.D.
Samuel S. Drury, *Secretary*

Library

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Abraham Pollen, M.D.
Francis J. West, M.D.
Werner D. Chasin, M.D.
David G. Cogan, M.D.
Edwin B. Dunphy, M.D.
Harold Bloomquist
Merle Fainsod, Ph.D.
Henry F. Allen, M.D.
Harold F. Schuknecht, M.D.
Charles T. Wood
Charles Snyder, *Secretary and Librarian*

Archives

Moses H. Lurie, M.D.
Francis J. West, M.D.
Charles T. Wood
Charles Snyder, *Archivist*

Salary

Henry Hixon Meyer
Horace W. Frost
William H. Claflin, III
Charles T. Wood

Personnel and Pension

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George A. McLaughlin
Melville Chapin
Charles T. Wood
Raymond W. Lyons
William F. Hayward

Social Service Advisory

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Madeline S. Shipsey, *Director of Medical Social Service*
The Rev. Thomas J. Carroll
Ruth Farrisey, R.N.
Weston Howland, Jr.
Mrs. Varaztad H. Kazanjian
Ralph L. Kolodny
Barbara Czechowski, R. N.
Mrs. Edgar H. Kent
Moses H. Lurie, M.D.
Henry A. Mosher, M.D.
Karl Reimer, M.D.
Ethel D. Walsh
Alfred D. Weiss, M.D.
Charles T. Wood
Samuel S. Drury
James Hamill

Medical Staff

Ophthalmology

Chief of Ophthalmology

Henry F. Allen, M.D.

Surgeons in Ophthalmology

Carl C. Johnson, M.D.
Earl S. Seale, M.D.
Harry E. Braconier, M.D.
Sumner D. Liebman, M.D.
Abraham Pollen, M.D.
Charles L. Schepens, M.D.
Taylor R. Smith, M.D.
Karl Riemer, M.D.

Associate Surgeons in Ophthalmology

W. Morton Grant, M.D.
Henry A. Mosher, M.D.
Robert J. Brockhurst, M.D.
Alfred W. Scott, M.D.
David H. Scott, M.D.
Ichiro D. Okamura, M.D.
Charles D. J. Regan, M.D.
Warren D. Haley, M.D.
Thomas P. Cronin, M.D.
David D. Donaldson, M.D.

Assistant Surgeons in Ophthalmology

John M. Hill, M.D.
D. Robert Alpert, M.D.
S. Arthur Boruchoff, M.D.
Richard B. Chapman, M.D.
Claes H. Dohlman, M.D.
Irving L. Pavlo, M.D.
Byron S. Lingeman, M.D.
George M. Olive, Jr., M.D.
Richard J. Simmons, M.D.
Baruch J. Sachs, M.D.
Ralph H. Hinckley, M.D.
Michael Wiedman, M.D.
John R. Gehring, M.D.
Carl Gates Freese, Jr., M.D.
Robert C. Lawlor, M.D.
J. Wallace McMeel, M.D.
Frederic B. Breed, M.D.

Assistants in Ophthalmology

Lloyd M. Aiello, M.D.
Eliot L. Berson, M.D.
Charles K. Beyer, M.D.
John M. Carroll, M.D.
Eugene C. Ciccarelli, M.D.
Albert R. Frederick, Jr., M.D.
H. Mackenzie Freeman, M.D.
Stephen J. Fricker, M.D.
George E. Garcia, M.D.
Alexander R. Gaudio, M.D.
Roland E. Houle, M.D.
William T. Humphrey, M.D.
Paul D. Hurley, M.D.
B. Thomas Hutchinson, M.D.
Joseph C. Kim, M.D.
Robert S. L. Kinder, M.D.
Mohandas M. Kini, M.D.
Joel A. Kraut, M.D.
Arnold J. Kroll, M.D.
Brent W. Lambert, M.D.*
Deborah P. Langston, M.D.
G. William Lazenby, M.D.
Howard M. Leibowitz, M.D.
Irwin T. Mancall, M.D.
Ernst J. Meyer, M.D.
Joseph Michon, Jr., M.D.*
David Miller, M.D.
Robert A. Petersen, M.D.
Silvio R. Pirquet, M.D.
Ronald C. Pruett, M.D.
Richard M. Robb, M.D.
Perry Rosenthal, M.D.
John G. Sebestyen, M.D.
Richard A. P. Thoft, M.D.
David S. Walton, M.D.
Donald R. Weis, M.D.
Shirley H. Wray, M.D.[1]

*Military Leave of Absence
[1]Neuro-ophthalmology

Consulting Chiefs of Ophthalmology

Edwin B. Dunphy, M.D.
Paul A. Chandler, M.D.
David G. Cogan, M.D.

Senior Consulting Surgeons

Trygve Gundersen, M.D.
William P. Beetham, M.D.
Virgil G. Casten, M.D.
Brendan D. Leahey, M.D.
Mahlon T. Easton, M.D.
Albert E. Sloane, M.D.
Francis J. West, M.D.
Joseph M. Clough, M.D.
Garrett L. Sullivan, M.D.

Honorary Staff

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Charles H. MacLaughlin, M.D.

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Linley C. Happ, M.D.
Julian F. Chisholm, Jr., M.D.
Arthur M. Morrissey, M.D.
Bertha Offenbach, M.D.
Paul M. Runge, M.D.

Director of Glaucoma Consultation Service

W. Morton Grant, M.D.

Director of the Retina Service

Charles L. Schepens, M.D.

Director of the Cornea Service

Claes-Henrik Dohlman, M.D.

Corneal Contact Lens Service

Perry Rosenthal, M.D.

Scleral Contact Lens Service

John M. Carroll, M.D.

Director of Ocular Motility Clinic

Stephen J. Fricker, M.D.
Anne E. Stromberg, Orthoptist

Director of Ophthalmic Pathology

Taylor R. Smith, M.D.
Toichiro Kuwabara, M.D., *Assistant*

Senior Consulting Ophthalmic Pathologist

Parker Heath, M.D.

Associate Staff — Ophthalmology

Eeva-Liisa Martola, M.D.
Elliot M. Finkelstein, M.D.
Harvey H. Slansky, M.D.

Residents in Ophthalmology

Don C. Bienfang, M.D.
Chester J. Boulris, M.D.
Leo T. Chylack, M.D.
Andrew A. Dahl, M.D.
Richard L. Dallow, M.D.
Robert A. D'Iorio, M.D.
Thomas A. Farrell, M.D.
Alexander R. Gaudio, M.D.
Robert A. Gorn, M.D.
Arthur S. Grove, M.D.
Steven V. Guzak, Jr., M.D.
David A. Hill, M.D.
Eric H. Johnson, M.D.
Murray A. Johnstone, M.D.
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James P. McCulley, M.D.
Michael F. Marmor, M.D.
Joseph Michon, Jr., M.D.
Peter B. Mooney, M.D.
Don H. Nicholson, M.D.
Roger V. Ohanesian, M.D.
Gerald D. Rogell, M.D.

Kenneth A. Stampfer, M.D.
William R. Sullivan, M.D.
James H. Swarr, M.D.
Oscar Wand, M.D.
Eugene B. Wolchok, M.D.

Pre-Clinical Residents in Ophthalmology

Steven N. Benjamin, M.D.
William S. Holt, M.D.
David W. Putnoi, M.D.

Fellows in Ophthalmology

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Daniel Miller, M.D.
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William L. Hayden, M.D.
Robert H. Lofgren, M.D.
Thomas R. Klein, M.D.
Alfred L. Hurst, M.D.
Werner D. Chasin, M.D.
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John C. Trakas, M.D.
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Charles W. Cummings, M.D.
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Philip Mysel, M.D.
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Robert L. Goodale, M.D.
Carl H. Ernlund, M.D.
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Francis L. Weille, M.D.
Vincent J. Kelley, M.D.
Edgar M. Holmes, M.D.
Walter J. E. Carroll, M.D.
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J. Charles Drooker, M.D.

Senior Consulting Surgeon for Plastic Operations

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[1]Plastic

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Stephen A. Smith, M.D.
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Ernest A. Weymuller, Jr., M.D.
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Michael J. Murray, M.D.

Clinical Fellow in Otolaryngology

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Medical Staff
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The members of the medical staff of the Massachusetts General Hospital are consultants to the Infirmary, and in this capacity become a part of the staff of the Massachusetts Eye and Ear Infirmary.

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Department of Otolaryngology

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Publications
October 1, 1969-September 30, 1970
Department of Ophthalmology
Surgical and Research Staffs

First Author in Capitals.

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Chader, Gerald J. (See REIF-LEHRER, L.)

CHANDLER, Paul A.: Participant in : "Second National Meeting of the New York Glaucoma Group." Int. Ophthal. Clin. 9:113-221, Spring 1969. (Published 1970.)

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Cogan, David G. (See HALLETT, M.)

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DOHLMAN, Claes H.: Letter to the Editor: "Boston Researchers' View of Collagenase Developments." Clin. Trends 8:5, Nov. 1969.
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First there was the wrecking ball . . . demolishing the old Gardner and the Eaton-Peabody building to make room for the new.

And then there was the pile driving . . . the opening show for the sidewalk superintendents . . . as the special support system called Pressure Injected Footing went in . . . 18 along the front for a total of 165 around the building.

And then there was the mud, and the bore-clogging clay as the thicker pilings were seated.

And then there were the pits . . . the yawning crevasses and the stretches of criss-crossed wood framings . . . to hold the enormous slab of concrete that would serve as the base.

And it seemed to go on endlessly . . . below ground level. And then at high noon on the 7th of January, 1971, the first steel was raised!

And it went up, and up and up, until now steel rises nearly a full floor's height above everything else in sight.

A very chic and "with it" fashion show was the elegant event topping the Ladies Visiting Committee's year of activities.

Held in April at the Hotel Somerset, European and American designers' collections were presented by Lord & Taylor of Boston.

Proceeds from tickets plus generous additional contributions netted a sumptuous sum in excess of $5,000 for the Infirmary's building fund, the purpose for which the benefit was held.

. . . . .

One of Beacon Hill's quaintest wood-paved streets, Cedar Lane Way, was transformed into a two-day Art Fair — an independently sponsored building fund benefit undertaken by Ted Stockman of our clinic administrative staff. Boston's Mayor Kevin White helped promote the show, and as a former Cedar Lane Way resident as well as Infirmary patient, couldn't resist attending in person.

The singular role of the nurse in caring for the troubled eye, ear, nose and throat patients at the Infirmary was, once again, the pride of the hospital.

In 1970, in addition to the established training programs — now attracting candidates from all over the world — the nursing department concentrated on newer programs to assure even higher quality care in the future.

One, the "team" nursing concept, provides for nursing group consideration of all aspects . . . planning, continuity, communication and evaluation . . . of the basic needs of each of our specialty patients.

Another established a Nursing Care Plan Form to systematically assess, assign and review individualized patient care.

Six day-long programs for nursing school students were held, providing instruction for nearly 100 RN candidates.

An article on "Techniques for Teaching Patients with Sensory Defects" authored by Nursing Education Coordinator Irene Cullin was published in the September 1970 edition of "The Nursing Clinics of North America". And, requests for reprints haven't let up since.

Few scenes of greater nursing drama take place than in the hospital's Recovery Room. Here, the nurses and doctors zealously guide patients through the first phase of recovery from anesthesia and surgery.

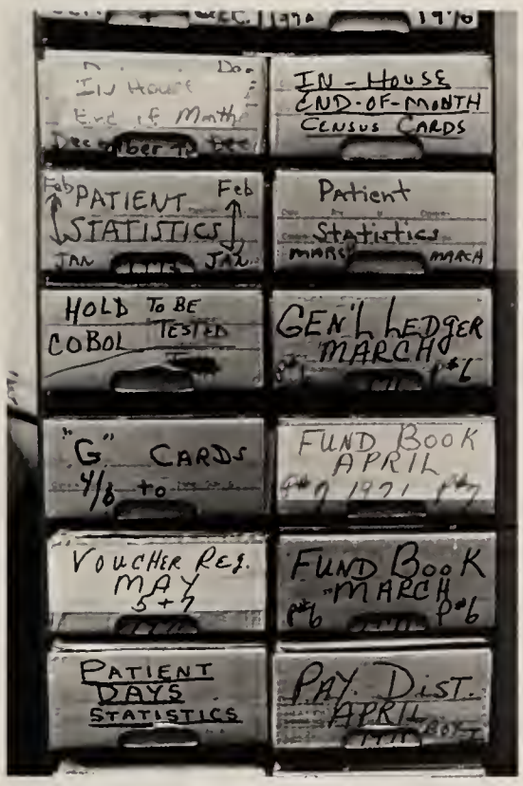
Constant attention is given vital life signs and when they signal patient distress, no time is lost in applying "crisis" intervention techniques. The emergency, thus, is the routine of the Infirmary's Recovery Room nurses.

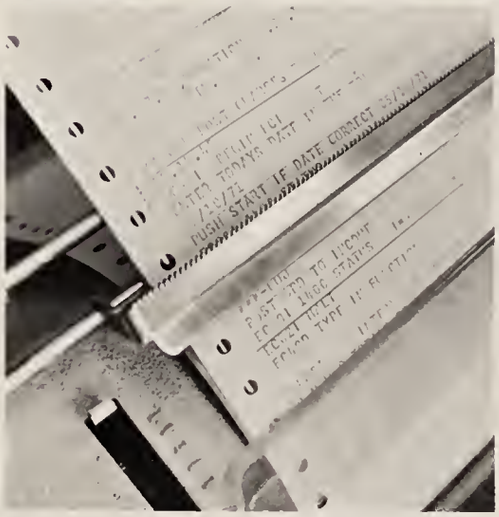
In keeping with a widespread national trend, ambulatory patients again markedly increased their use of day clinics.

Some 6,500 more patients came for treatment in the Eye Clinic than during the previous year, bringing the total to nearly 59,000. A proportionate increase in ENT Clinic usage had more than 1,600 additional patient visits in 1970 for a total of 23,400.

The clinics were able to institute all-day coverage on the Eye Service, making specialty care far more convenient for those patients. All-day coverage, already in effect for Ear Clinic patients, was further streamlined by adopting a specific appointment schedule: a practice to be instituted in time throughout the clinics.

As in the past five consecutive years, the greatest rise in numbers of patients was reflected in the need for emergency care. Again, a clearcut 20 percent increase occurred with more than 26,300 emergency cases arriving for treatment; more than 3,000 of these people were in need of emergency minor surgery.



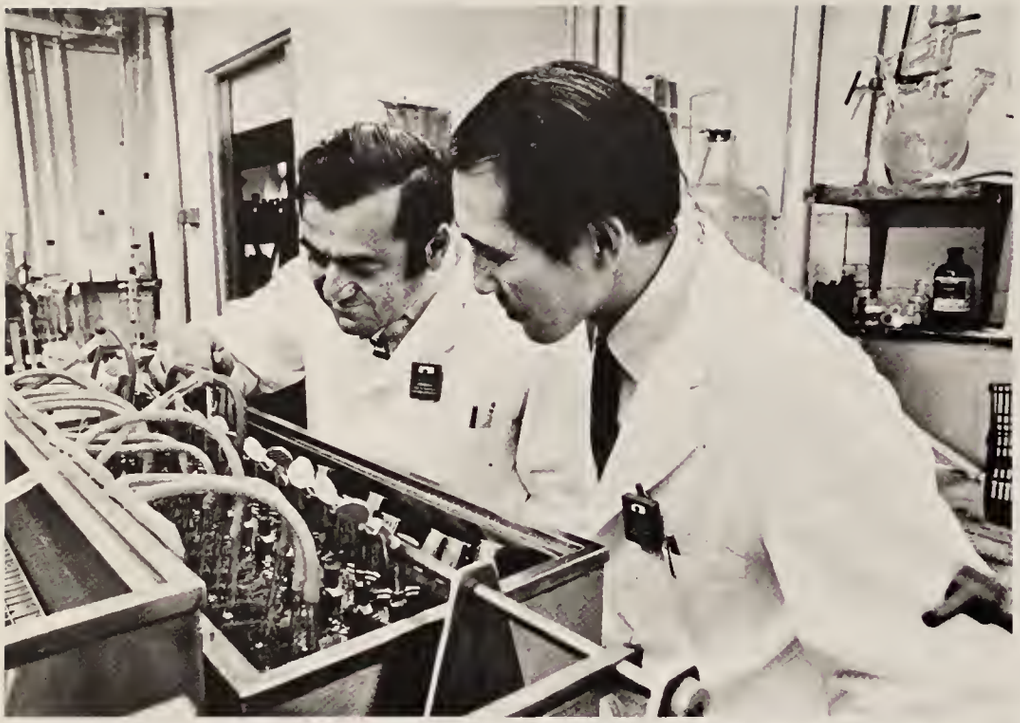


A pioneer in the use of computers for hospital purposes, the Infirmary upgraded its computer equipment in 1970.

The super-industrious new IBM System 360 Model 25 possesses far greater versatility — a choice, for example, of many computer "languages" — than the original IBM 1440.

It "reads" programs, "remembers" details, and "prints out" data with amazing alacrity and indefatigable frequency. New uses are found for its electronic wizardry all the time, from writing personalized letters for fund appeals to predicting future occupancy rates.

To challenge its speed, Infirmary programmers tested one of its claims: Tell the computer to keep adding one and one and one and one . . . In the split-second interval that the human hand takes to press the start, and then the stop, button, the computer had added . . . one by one by one by one . . . to the 100,000 mark!



The legendary research reputation of the Howe Laboratory of Ophthalmology has been growing for 40 years.

Here, the basic sciences are brought to bear on ophthalmic problems, bringing together the "bench scientist" and the clinical practitioner, to challenge the forces of disease and blindness.

Studies explore the underlying factors in cataract formation, glaucoma, nerve disorders of the eye, fundamental physiology and abnormal states.

The Howe was the first endowed eye research laboratory in this country . . . functioning as an independent department of Harvard Medical School . . . and remains the foremost.

In 1970 Dr. David G. Cogan, director of the Howe Laboratory, was named the first incumbent of a new HMS professorship, the first in this country committed to eye research.

Arrangements were made for the famed Eaton Peabody Laboratory of Auditory Physiology to work out of temporary quarters at the Massachusetts Institute of Technology. Eaton Peabody, created as a joint effort by the Infirmary and MIT, brings together investigators from the divergent fields of medicine and engineering to work toward the common goal: a better understanding of hearing.

The laboratory will be re-established at the Infirmary as soon as permanent new facilities are finished in the new building.

Through careful planning, the elaborate and complicated equipment employed by the laboratory was dismantled and set up again at the MIT base with amazing rapidity, causing only minimal interruption of current work on the auditory nervous system.

For our personnel, under the aegis of a new director, a new program for promotion from within our own ranks was established. To strengthen opportunity and to encourage ambition, all job vacancies are offered — first — to present employes.

In Housekeeping, new supervisory positions were created and awarded to two employes who had demonstrated leadership ability; the first advancements within the new program. During the year, several others followed suit.

In Dietary, two new food services were introduced, one permitting gourmet-style "Dining Out" right at the bedside; and the other offering a full-menu selection daily to patients whose diets are not restricted.

Among four special projects undertaken by the Social Service Department, two experimented with group approaches to social problems in adjustment for glaucoma and strabismus patients.

For two strenuous days in March the Infirmary conducted an educational seminar for Greater Boston medical newswriters.

It marked the first time a hospital ever used the seminar approach to deepen basic understanding of a medical specialty for members of news media. And it brought together the newsmen — upon whom the public depends for reliable medical reports — and physician-researchers for an orderly review of the scientific background of the Infirmary's specialties.

. . . . .

A corps of Candy-Stripers was recruited by the Volunteer Department, thereby adding youthful energy and refreshing spirit to that service. Career-oriented tours for local high schoolers also were conducted at the request of teachers and directors of Future Scientists and Nurses of America clubs. The number of volunteers rose to 134 and the hours of service to 14,423. A Volunteer Coordinating Committee has been formed to translate ideas for volunteer assignments into workable plans in the months ahead.

1970

Employe Service Award Recipients

Twenty Years

Miss Tyyne Lamsa, R.N.
Miss Dorothy Landers, R.N.
Mr. Lloyd Ramsdell
Miss Ruth Straitiff
Miss Ann Stromberg

Ten Years

Mrs. Luba Borkowska
Mrs. Mary Brady, R.N.
Mrs. Flora Canezza
Miss Barbara Healy
Miss Lorraine Marchand, R.N.
Miss Constance Montemarano
Miss Patricia Reardon
Mrs. Hope Shedin, R.N.

Five Years

Mrs. Ellen Alekel, R.N.
Mrs. Beatrice Capone, R.N.
Miss Marie Carideo
Mr. William Cashin
Miss Diane DeLeo
Miss Patricia Donald, L.P.N.
Miss Karen Drescher, R.N.
Erhan Erdem, M.D.
Mrs. Frances Feigenbaum
Miss Elena Frerking, L.P.N.
Miss Ethel Hargrove
Mr. Willie Keith
Miss Margaret Kelley
Miss Rita Kelly, R.N.
Mr. Roger Lancaster
Miss Agnes Love
Miss Mary Mann, R.N.
Mr. William McGowan
Donald Morest, M.D.
Miss Mary Morris, R.N.
Mr. Harold Noonan
Miss Barbara Norris
Mrs. Grace Parsons, R.N.
Mrs. Carol Peters, L.P.N.
Miss Rose Peters
Mr. Michael Prinn
Miss Susan Showstack, R.N.
Miss Georgia Smith, L.P.N.
Mrs. Edna Staut, R.N.
Mrs. Elizabeth Wade

Volunteer Service Award Recipients

Honor Roll

Mrs. Mark W. Adair
Miss Clare Blackden
Miss M. E. Blackden
Mr. Basil Brownell
Miss Rose Burnham
Miss Leah Cook
Mrs. Maxwell Fish
Mrs. Harvey Graham
Miss Janet Gorton
Miss Natalie Hebert
Mrs. Varaztad Kazanjian
Mrs. Vincent L. Scanlon

Over One Hundred Hours of Service

Mrs. Harry Belknap
Mrs. Charles Innes
Mrs. Edith Lewis
Mrs. Roy F. Littlehale

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We are here to add
what we can to,
and not get what
we can from life.

— Sir William Osler

Du Temps Perdu — Fond Memories of Things Past

One Hundred and Forty-fifth Annual Report - 1971

One door never closes . . .

Report of the Director

During 1971 we the people of the Infirmary constituted a very select group.

In the annals of the hospital we shall be recorded forever as both the last and the first: The last to know the Infirmary of old and the first to know the new.

All too naturally as we pass from day to day engrossed in the routine of our work we are simply unaware of the larger scale of which we also are a part.

Yet there's much to take from an occasional reminder that our presence here carries a longer perspective. And there's no time like the moment, the preparation of an annual report, for looking a bit into our more historic position.

Most striking is the memorable role in which each of us is now cast. We shall forever be those few who knew the old Infirmary as it is and was for so many long and productive years.

Think of it. 1971 is the final year of this phase of the Infirmary's life. Members of the Infirmary staffs of all the tomorrows to come will know only a different place, different practices, a very different hospital existence. Better, but transformed.

When seen this way, in the light of their passage, conditions that have been difficult and trying suddenly take on a comforting familiarity. The crowded, the temporized, the worn become somehow dear.

Though little appreciated, there is nonetheless real security in one's surroundings. We know what lies around the bend because we've been there so many times. Our feet know the way, our hands the shelf, our eyes the sign. We work easily where we are accustomed to being, despite the admitted shortcomings.

This is worth noting . . . for many of us, even treasuring . . . this last span of time when we shall all be where we are, as we are . . . making the best of such as we have . . . indeed, making the most of it.

We can, should and do take pride in the extent of our accomplishments, especially when they have been managed, as they have, under the stress that accompanies the razing of the old and the building of the new.

We not only have persevered, we have progressed.

Towering above us now is our new building. It basically went up in 1971, girder by girder, floor by floor, in some sections to a total of 15 stories and in others borne by bridge trusses above our present roof to a new height eight full stories higher. Now completely encased in precast concrete outer walls, the facility is destined to stand for more decades than any of us shall see.

But we are the ones who saw it come into being. We are part of its emergence. Its foundations rest just as surely on the public's and our own faith in the Infirmary's continued excellence as on the formidable engineering skills that gave it substance.

While it evolved we worked, if anything harder than before, and we did it without missing a beat in the everyday provision of fine care for our patients, training for residents in our specialities, or the steady advance of research in our special scientific fields.

Here, let me note just a few of the benchmarks of our activities during 1971.

In a year buffeted by strong economic crosswinds and a seemingly resultant decline nationally as well as locally in hospital usage, the Infirmary not only held its own in use made of inpatient services but actually experienced an increase in ambulatory care. A total of 10,699 surgical procedures were performed while in the Eye Clinic 62,723 patient visits were handled, nearly 4,000 more visits than in 1970; and ENT Clinic visits rose by nearly 600 to a total of 23,921. Considering the limited facilities available it is a remarkable achievement that the Clinics (including the Emergency Ward) were able to provide care for more than 113,000 patient visits in '71.

A major new department, that of Anesthesiology, was instituted at the Infirmary last July. This formalized specialty anesthesia services for patients undergoing eye, ear, nose and throat surgery. The inception of the department at the Infirmary officially correlates the appointment of the Chief of Anesthesia here with his becoming Professor of Anesthesia on the Harvard Medical School Faculty. Dr. Aaron Gissen, formerly of Columbia University College of Physicians and Surgeons, became the first to hold the new dual post.

In nursing, for the first time, stewardship of the operating and recovery rooms was recognized as a need distinct from overall nursing responsibility. To that end, a separate nursing post of Director of Operating Rooms was established.

Our dietary service introduced yet another innovative bill of fare in addition to the previously highly successful "Dining Out." Via a completely revised "hotel style" menu, now every patient (not on a restricted diet) may choose any foodstuff he likes at each and every meal.

Social Service was awarded funds and support for a much needed study of how to motivate glaucoma patients to cooperate with medical recommendations. Funding came from the Seeing Eye Corporation and the project was undertaken jointly with the Medical Foundation, a voluntary non-profit research organization. Further, to spread the word on the significance of strabismus and the importance of early treatment, Social Service also held symposia for key personnel in the Boston School Department, the state Department of Education and visiting nurse associations in the Metropolitan area.

Benefits also flowed from community-wide social events and inhouse activities sponsored by the Infirmary's enterprising Ladies Visiting Committee. The range of their generosity reaches from toys for all our young patients at Christmastime to bolstering by substantial amounts the Building Fund for the new hospital.

As is always true, we again knew all the exigencies of every hospital's experience. Death claimed some of the Infirmary's most devoted friends and they are reported separately. Perhaps, however, due to the broad sweep of change that now brushes us all, we were more conscious of our losses than ever before.

Soon the time will be at hand when we shall make the big move, not only into new quarters but into a whole new era for the Infirmary. Of course, our hopes could not be higher, our anticipation greater.

Still, for this short and last stay here in the present Infirmary, let's appreciate the closeness we've known. It's been a good hospital and has served its great medical purpose with distinction.

Memories crowd each corridor, each one a fond remembrance of things past.

This annual report will try to pictorially capture them, so we can take them right along with us into the even more personally promising and professionally prolific years ahead.

Charles Wood
Director

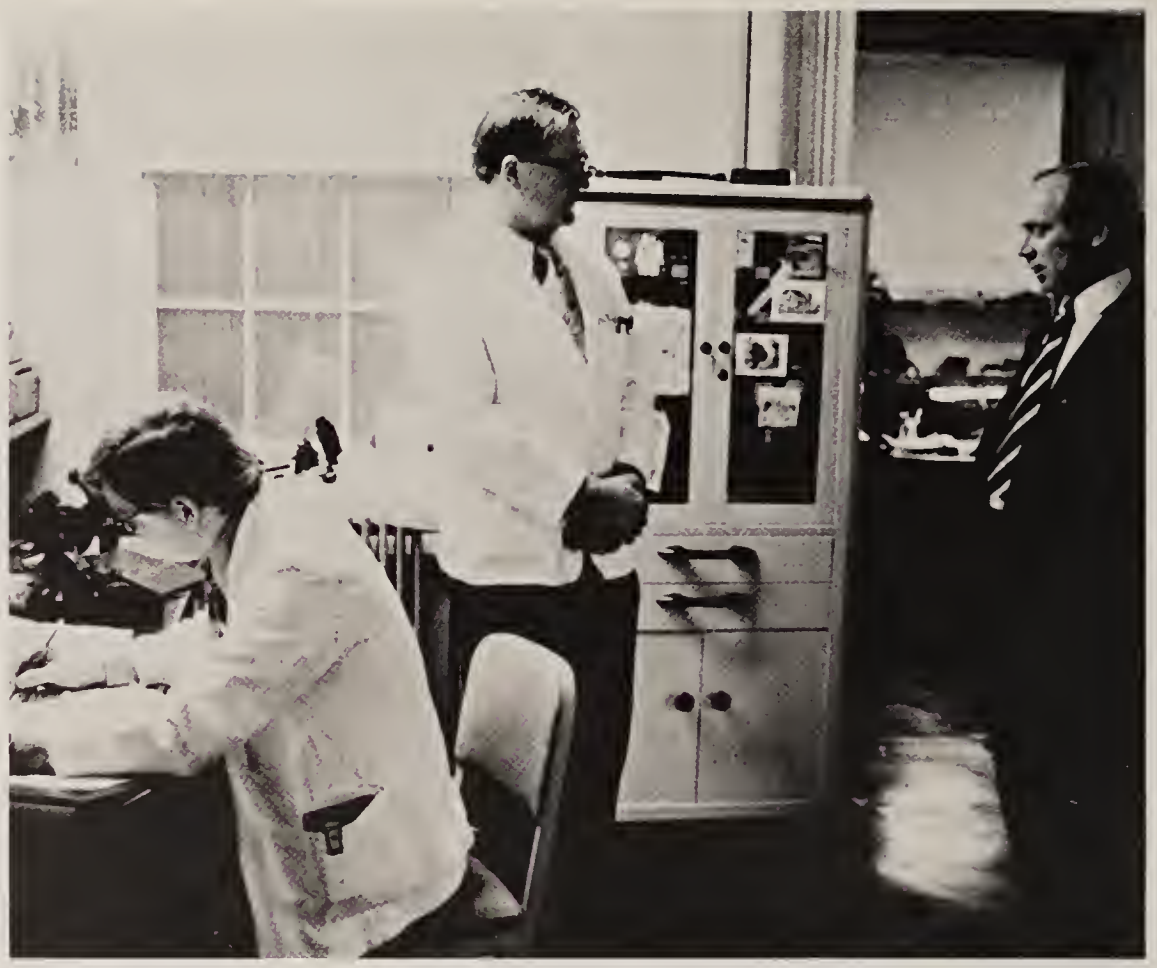
Providing the special medical guardianship so vital to the anesthetized patient is Dr. Aaron Gissen, the first Chief appointed to the Infirmary's newly established anesthesiology service. The needs of the Infirmary's patients are unusual in that all are troubled by a disorder of the eye, ear, nose or throat that in itself could complicate their tolerance of anesthesia. The challenge, as Dr. Gissen sees it, is to attain an anesthesiology service that will measure up to the superb surgical standards already established.

Dr. Aaron Gissen, chief of Anesthesiology

The demand for clinic services continues to rise at the Infirmary as elsewhere.

Here in 1971, however, the larger census was accommodated without any increase in physical space. This clinic growth was managed by reducing waiting time for patients, and better coordination of services.

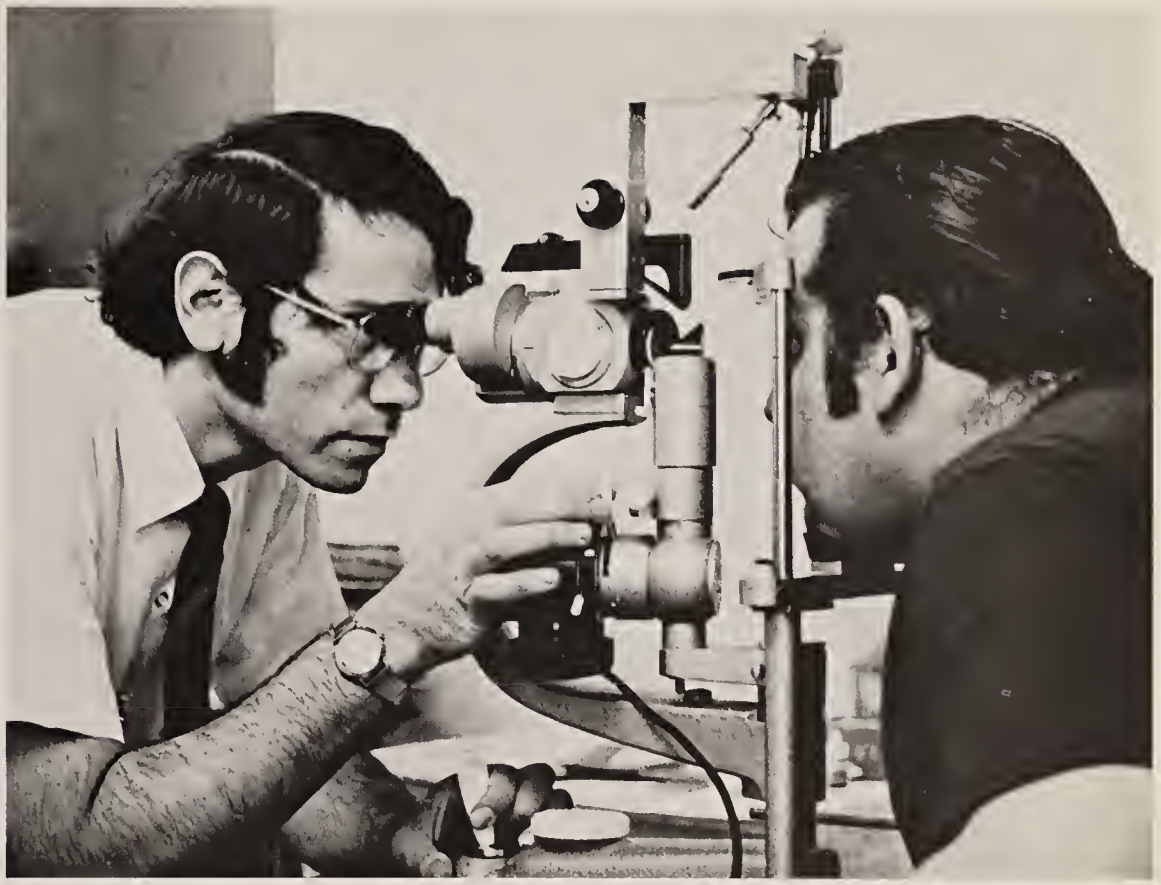
While the public usually associates the use of clinics with patients who live nearby, it is interesting to note that last year approximately 3,000 of our clinic patients came from out-of-state, some of them quite distant from Massachusetts.



Clinic rotation of residents in specialty training is a matter between assistant director for Ambulatory Services James Hamill and Dr. Charles D. J. Regan, assistant to the chief of Ophthalmology and associate director of residency training programs in Retina Service. Seated in foreground is Eye Service resident Dr. Eric Johnson.

Clinic services also often involve consulting with requests for information, as here James Hamill confers with Tanya White, audiologist.

An innovation in the residency training program delivered eye care for the first time to those in need of it on the premises of the Soldiers Home in Mass. (Chelsea). There on Tuesday afternoon two residents in training on the eye staff and a staff ophthalmologist examined Soldiers Home patients. Any indicated surgery would be performed in the Chelsea facilities surgical suites.



Here, Eye Service resident Stephen Benjamin examines eyes of Soldiers Home patient on premises in Chelsea.

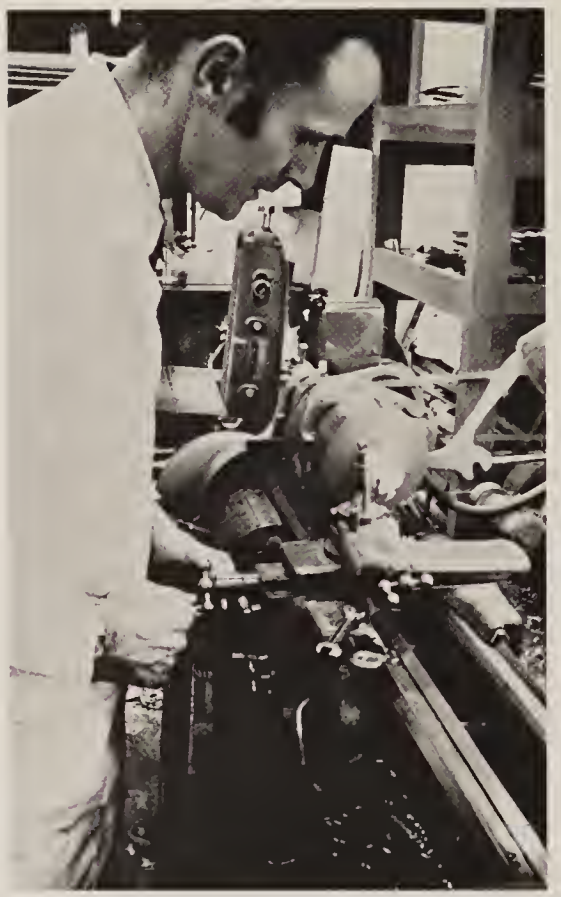
In the single year of 1971, through this portal passed more than 26,500 patients with an eye, ear, nose or throat problem of an emergency nature.

EW senior clerk Mary McFarling is usually the one to see them arrive and, practicing triage, make sure that those in need of the most medical attention are seen first. Nearly 3,000 require immediate minor surgery. Others, of course, must be hospitalized.

In modest surroundings on the fifth floor has long functioned the ophthalmic instrumentation shop of the world-famed Howe Laboratory of Ophthalmology.

Funded by the Center Grant of the U. S. Public Health Service, ultrarefined machining and tooling skills are applied to build and modify laboratory and clinical equipment for research. All the work is conducted under the aegis of Dr. David G. Donaldson.

Among the many esoteric devices that have been produced here is an electronic perimeter for plotting both central and peripheral fields of vision on a single test instrument. Also, in daily use are four high magnification stereo cameras for recording outer and inner eye photography. All four cameras are wholly constructed in the ophthalmic shop and two are the only ones of their kind in the world.



Instrument maker Werner Mueller, Jr. turning a piece of aluminum on a metal lathe . . . and at right, at assembly bench in old ophthalmic shop.

Infirmary's financial affairs take on new dimensions, too. Taking the helm in '71, Controller Robert Dulude assumed responsibility for planning, controlling and accounting for all finances. His department works with every phase of management operation regarding costs budgets, payrolls, accounts payable and billing.

Additionally, there were all the new rules and regulations of the national economic stabilization act to comply with. This, of course, involves control of wages and prices in nearly all segments of the economy, but especially hospitals.

Since September, plans for a complete financial reorganization have been developed to gear arrangements to expanded operations in the new building.

New controller Robert Dulude shown here with his assistant, Joseph Hanley.

Since nearly all of the Infirmary's patients undergo surgery, Operating Room preparedness, surgical nursing and post-operative recovery require a distinct concentration of expertise.

The range of this professional category reaches pre- to post-operative phases — from control of central supplies essential to the proper pre-op set up of OR linens, surgical packs and equipment specific to each procedure, across the array of surgical techniques used daily for both eye and ENT operations, and through the post-anesthesia recovery process for all patients.

Responsibility for all specialized services attendant to the surgery itself, now is under the supervision of a new O.R. nursing director, Mary Fehlau, R.N. She directs management of the patient in the operating room and oversees highly trained nursing personnel there. Here, Ms. Fehlau checks procedures with Recovery Room nurse Judy McGinn, RN.

Upon admission, patients now have their heart function tested in a convenient EKG station set up next to the Admission Office. Unique to the system, however, is the electronically computerized analysis of the test via a linkage with a medical group at Mount Sinai in New York.

On the spot the machine produces a graph of the heart impulses for immediate study by Infirmary physicians.

Simultaneously, a tape of the reading is transmitted electronically to New York where the computerized analysis is made.

The EKG evaluation is returned within three hours, but can be back in less than 20 minutes in an emergency.

Lab technician Jyneen Newbegin carries out EKG test for incoming patient.

Food, bills of fare, and funtimes all were part of the dietary story.

The total number of meals enjoyed by patients and staff rose by 25,335 over the previous year to a new record total of 322,417 servings.

In larger measure, the larger demand was due to the fact that the construction workers found the Infirmary prepared food to be delectable and hard hats often intermingled with nurses caps and scrubwear.

For the patients mealtime became all the brighter due to the advent of a totally new hotel-style menu, unique within the hospital industry. Anyone not on a special diet now is free to choose their favorite food among seven entrees, multiple appetizers and salads and nine or more desserts, daily.

Catered events took on new dimensions, too, 1971 seeing the inclusion of the annual employes Christmas party, and the introduction of a buffet luncheon for the employes service award ceremonies.

Ye olde cafeteria . . .
Cashier Toby Gordon tends the till.

Serving time . . .
Ready down the line are: (left to right) Lucy Russell, Mary Sangiolo, chef John Evans, Freeman Patterson, John Oliver.

Tray preparation . . .
Dishing out the proper portions . . .
Helen Parker at left and Eddie Gadsen.

And then there was the first lady of swing . . . Ella Fitzgerald.

And the king of the cowboys of the silver screen . . . Gene Autry.

Both had eye problems that could affect the function of the retina, the light sensitive membrane lining the inner eyeball and connected by the optic nerve to the brain. And both left the Infirmary with the assault on their vision allayed, their sight returning in the affected eye.

Ella said: "It was a thrill as I walked out of the hospital. All the people gathered in the foyer clapping. It was just like doing a show . . . a great thrill. Sometimes we forget how wonderfully trained doctors and hospital workers are. We don't seem to support our hospitals enough." And Gene noted for newsmen the day before he was discharged: "The whole staff of the Infirmary is great."

Ella Fitzgerald being escorted from Infirmary by doorman Edward James and nurse Sarah Glazier.

News photographers focus on letter from Ireland Gene Autry received while at Infirmary.

The textbooks define it as routine daily nursing care.

But there's really nothing routine about the personal attention and individualized nursing provided each of the Infirmary's inpatients.

The long tradition of Infirmary-style nursing is to see each patient as a person in his own right, to practice specialty nursing appropriate to his medical and surgical needs, and beyond that to tend the creature comforts singular to each patient.

1

2

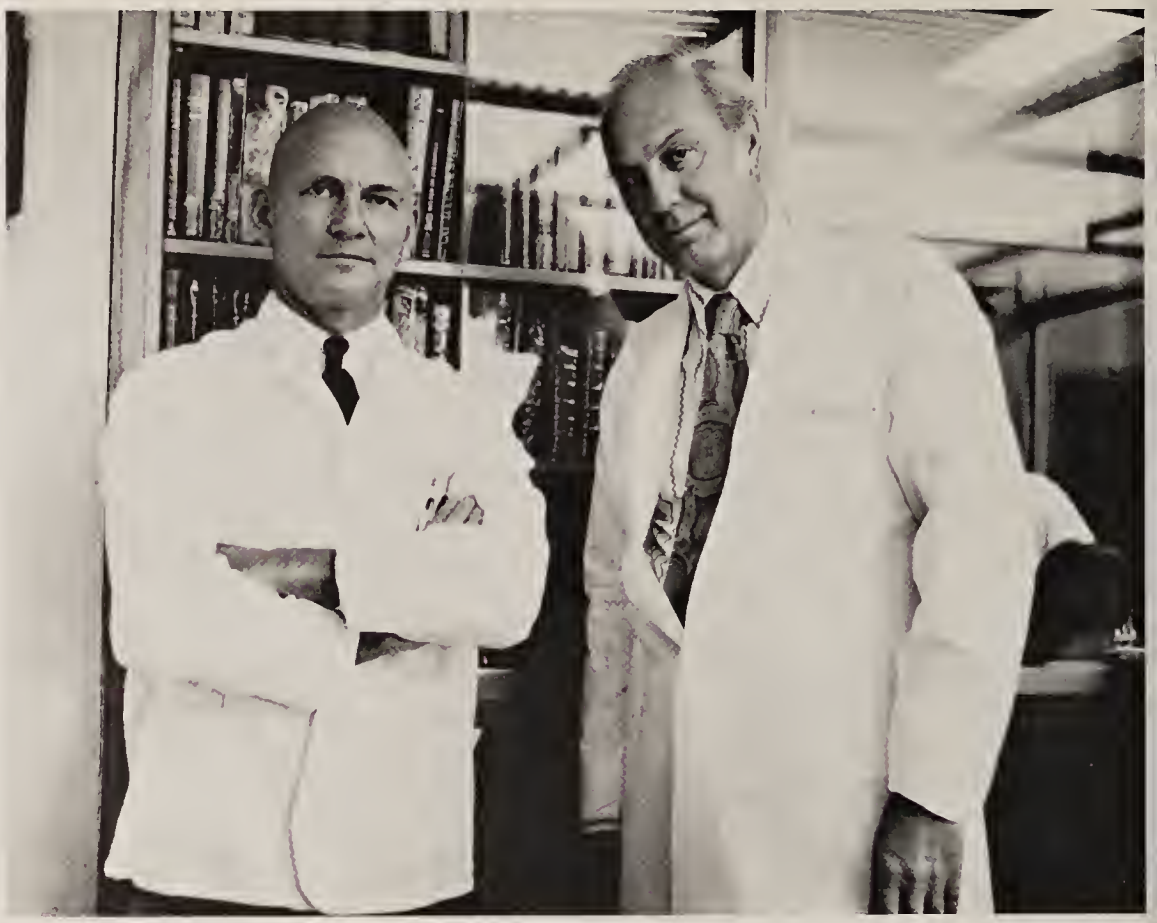
From the nursing station command posts on the floors shown here are:
1) Pat Walsh, RN, float, second floor
2) Joyce Robblee, LPN, third floor
3) Mary Keefe, RN, fourth floor, Children's Wing, with young patient Robert Sansone
4) Barbara LaPoint, RN, head nurse, fifth floor

In 1971 the medical side of nursing was realigned as an entity distinct from operating room nursing responsibilities, so that even greater attention could be given the nursing care needed by bedridden and semi-ambulatory patients.

3

4

Distinguished for leadership in their respective fields . . . Dr. Henry F. Allen, chief of the eye service of the Infirmary and chairman of the department of ophthalmology at Harvard Medical School . . . and Dr. Harold F. Schuknecht, chief of the ENT service and chairman of the department of otolaryngology, also at Harvard Medical School.



In background may be seen some of the rare books that are part of the world famed collection of medical literature of the Infirmary's Howe Library.

Massive efforts have begun to revitalize the vital service performed by the Boston Eye Bank, responsible for the collection and distribution throughout New England of eye tissue suitable for corneal transplant.

Justifiably, the drama of sight restoration attracted a fresh focus of public attention . . . even to the point where the role played by police in emergency transmission of the eye tissue was featured as part of a public service campaign to foster better community relations.

Executive secretary of the Boston Eye Bank Nancy Brown treats newly received donated eyes at small lab station in Emergency Ward.

When time makes the difference between blindness and sight... the police deliver.
WORK WITH THE POLICE IN YOUR COMMUNITY
MCCC

Selected as a highlight of a series of public service TV presentations was the police cooperation in picking up and delivering eye bank material.

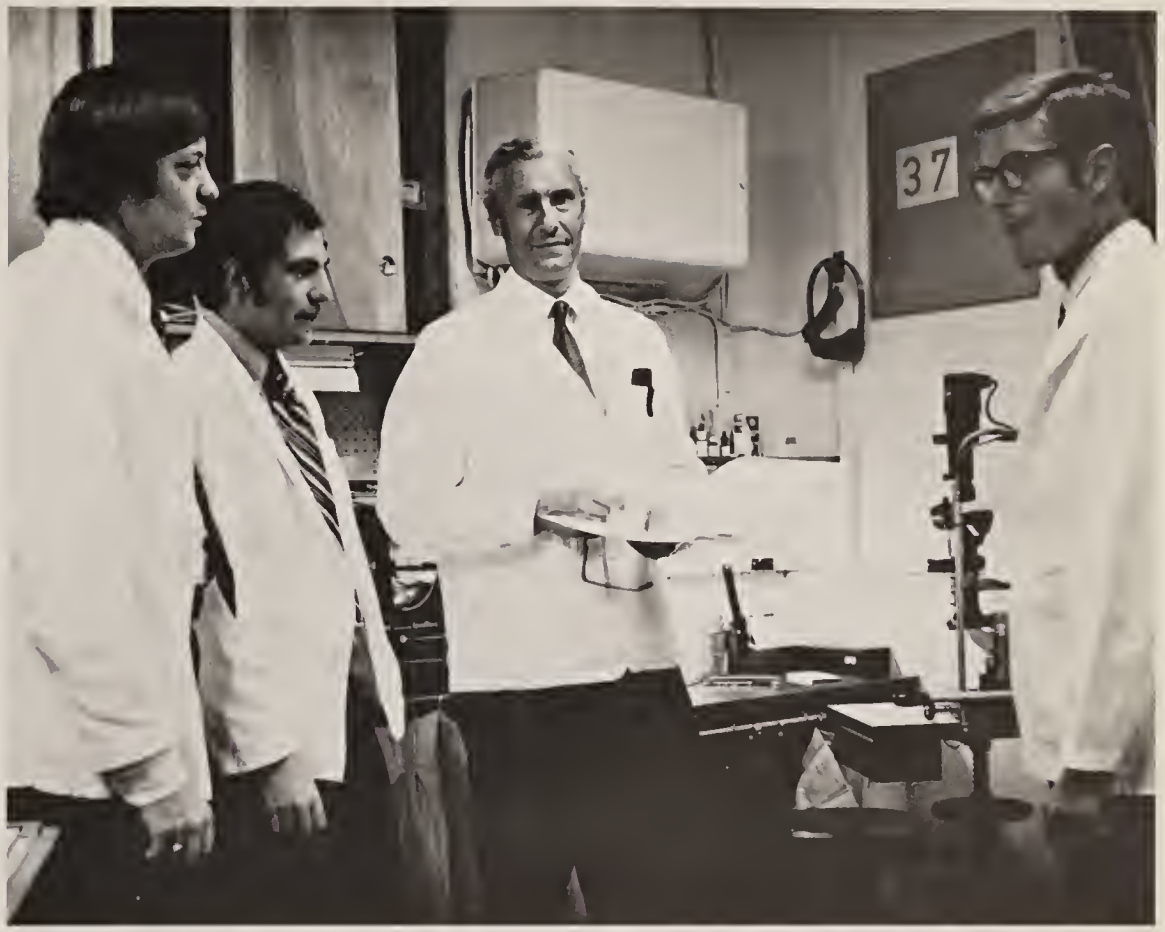
Dr. Claes Dohlman, director of the Infirmary's Cornea Serviee and assoeiate professor of ophthalmology at Harvard Medieal Sehool was doubly honored in 1971.

He was the recipient of both the coveted Friedenwald Award in Ophthalmology and the Bjerrum Award, eonferred eaeh year in Denmark for eontributions to ophthalmology.

Named in memory of Dr. Jonas S. Friedenwald of Johns Hopkins University, the award honors pioneer researeh and treatment of blinding eye disorders. Dr. Dohlman was a student of Dr. Friedenwald's as a post-doetoral fellow.

One of the world's noted experts on diseases of the cornea, Dr. Dohlman for 20 years has eombined the practice of eye surgery with studies of corneal problems.

Through this combination of researeh and medieal praetiee, Dr. Dohlman and his coworkers have greatly advaneed understanding of the bioehemistry of eorneal wound healing, the physiology of eorneal edema, as well as researeh on artifieial corneas and surgieal adhesives.



In a quiet corner of the Cornea Service, Dr. Dohlman (third from left) discusses a case with Cornea Fellows Drs. Harold Schneider, William Sullivan and John Barber (far right)

Working out of temporary offiees in the Nurses Residence assistant direetor for development, Samuel S. Drury, institutes all fund-raising endeavors, utilizing new eomputerized teehniques as well as the most produetive traditional ones.

Sam Drury

From laboratory bench . . .

Infirmary ENT laboratory team cast model guinea pig in new research role in study of Meniere's disease.

A malfunction of the inner ear, Meniere's disease has baffled medical science since it was identified more than a century ago. Characterized, initially, by attacks of dizziness and nausea, the disease, if untreated, concludes with relief of those symptoms at the price of profound hearing loss.

In 1971, new efforts here ingeniously employed the lowly guinea pig, previously discovered by earlier Infirmary research to be the only animal model for the disorder.

Known to result from a disturbance within the delicate fluid channels of the inner ear, a key question within Meniere's syndrome has been whether the excess fluid caused both the vertigo and hearing loss simultaneously. To discover the answer involves painstaking work in which the Meniere's-like condition must first be established and then the animal 'conditioned' to respond to hearing stimuli thousands of times over.

The importance of the work exceeds measure. Meniere's disease remains one of the major unsolved medical mysteries of our time. If the research can establish a true link between the excess fluid and the symptoms, that will provide fresh guidance to treatment of patients with the disorder.

Surgically creating Meniere's-like condition in animal ear is Infirmary electromicroscopist Robert S. Kimura, while ENT clinical research fellow Dr. John Wright observes technique at right. Following procedure (standing) is research fellow Dr. Bjorn Ethelm.

Applied to patient care . . .

A light-bright technique, pioneered during the past decade in the Infirmary's Howe Laboratory of Ophthalmology, combines dye-lit studies of blood vessels of the eye with new ultra-fast photography.

Called fluoresceein angiography, the technique was made available as a regular diagnostic service to eye patients in 1971.

Beyond bringing a new level of sophistication to the diagnosis of retinal disorders, the technique, which is relatively easy to undergo and painfree, also can signify certain conditions affecting the optic nerve heads.

During its first year, the fluoresceein angiography service worked almost exclusively as an adjunct to clinical diagnosis.

Next year plans are to turn some of the team's efforts back into further research with this luminescent new tool.

Ellen Wawrzynski serves as model for bio-medical photographer Ellen Maurer in fluorescein angiography lab, while Dr. William Humphrey observes. Precision instrument allows wide range of control for focusing and accuracy during fluorescein angiography study.

The cherry-pink smock of the volunteer and pink-striped pinafore of the candy-striper were more in evidence than ever at the Infirmary.

In response to a radio appeal for volunteers, their ranks grew to 222 with the addition of 36 regulars and 22 juniors. They contributed an additional 1,840 hours to the 13,492 hours of free time donated to our patients.

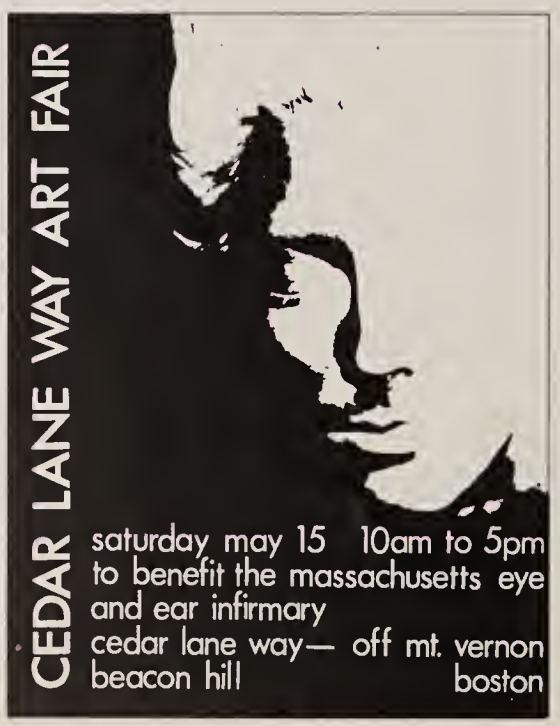
New assignments for volunteers now include the daily serving of coffee to clinic patients, an escort service to the airport coordinated through Social Service, fill-in clerical work, and distribution of the Infirmary's history. Traditional help with inpatients, especially children, expanded along with assistance with holiday decorations, employe special events and guided tours.

Grateful tribute by volunteer director Rosanne Ring was paid some off-site volunteers, the Ladies Aid group of the Auburndale Congregational Church who meet weekly to sew and package special gauze packs for our tracheotomy patients.

Volunteer director Rosanne Ring checks points of comparison in programs with visiting director of volunteers Ella Mae Jeremiah of the Eye and Ear Hospital of Pittsburgh.

Artfully expanding its horizons, the Cedar Lane Way Art Fair of '71 added a garden boutique where prints and small works of art were shown . . . and a "pure and simple cafe" where browsers could relax and sip on cold beer and well-chilled champagne.

As a fund raising benefit undertaken for the second year by its originator Ted Stockman, the show is becoming a May-time tradition for Beacon Hill strollers.


CEDAR LANE WAY ART FAIR
saturday may 15 10am to 5pm
to benefit the massachusetts eye and ear infirmary
cedar lane way— off mt. vernon
beacon hill
boston

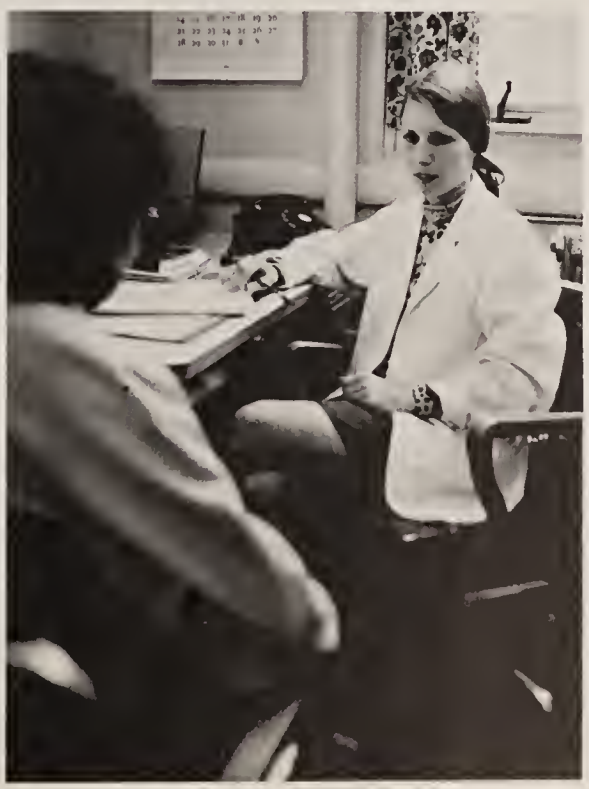
A new pattern of staffing now puts Infirmary social service workers in touch with patients earlier, by making the first point of contact the clinic or sub-specialty service where the patient is first seen.

By placing the social service workers right on the scene, their visibility is raised and barriers eliminated that sometimes interfere with quick and easy rapport.

Over the year, more than 1,700 patients benefited from the counseling, guidance and direct service of this department.

A long proposed study to discover how to motivate glaucoma patients to cooperate with their long-term programs of care won funding by Seeing Eye, Inc. The project will be conducted jointly by the Infirmary social service department and Medical Foundation, a voluntary, non-profit research organization.

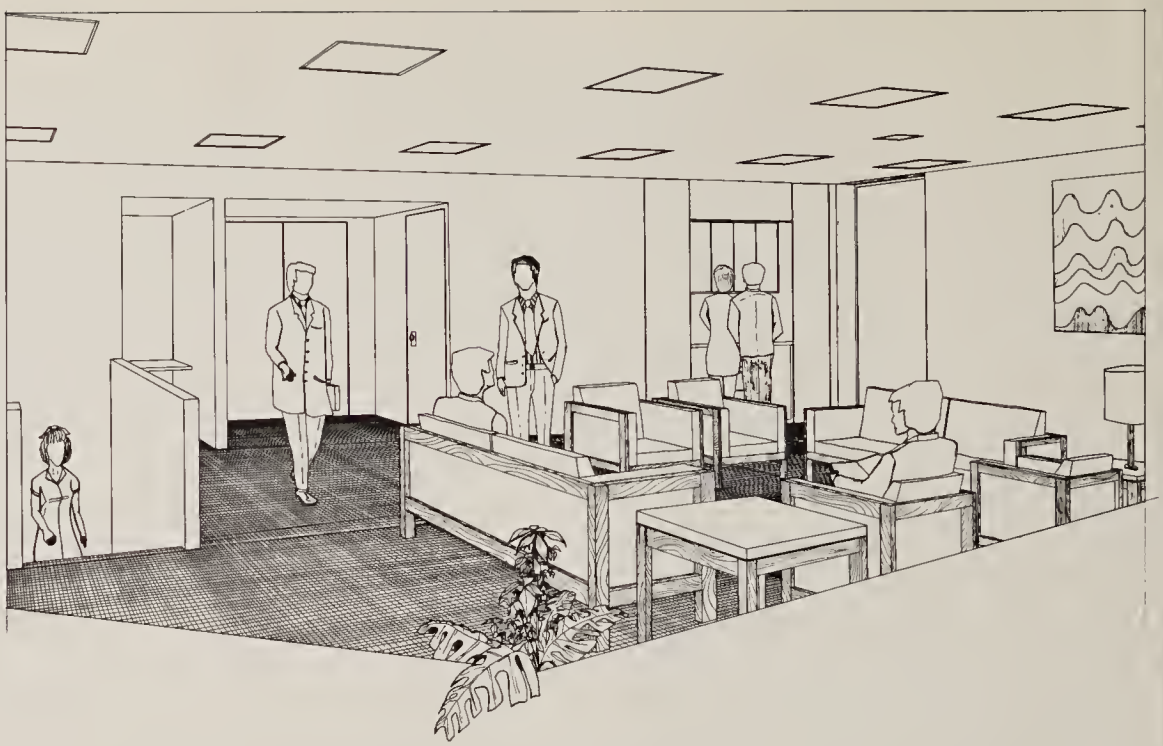
Special symposia to alert educators and public health agencies to the latent threat to vision in children with strabismus were sponsored among Social Service's various outreach efforts.



Traditional patient counseling is performed in the privacy of the Social Service offices. Here, Janet English, assigned to the Eye Service staff, is seen with patient.

Dr. Stephen J. Fricker, director of Ocular Motility Clinic, explains strabismus to Boston Public School nurses at social service seminar.

One day soon the new Nurses and Surgeons Lounge in the new building will open. Occupying a major area on the seventh floor, this is the way an artist envisions the lounge will look. It will serve not only as a private accommodation for the comfort and convenience of the professional staff, but also as a center for informal nursing and medical discussions.

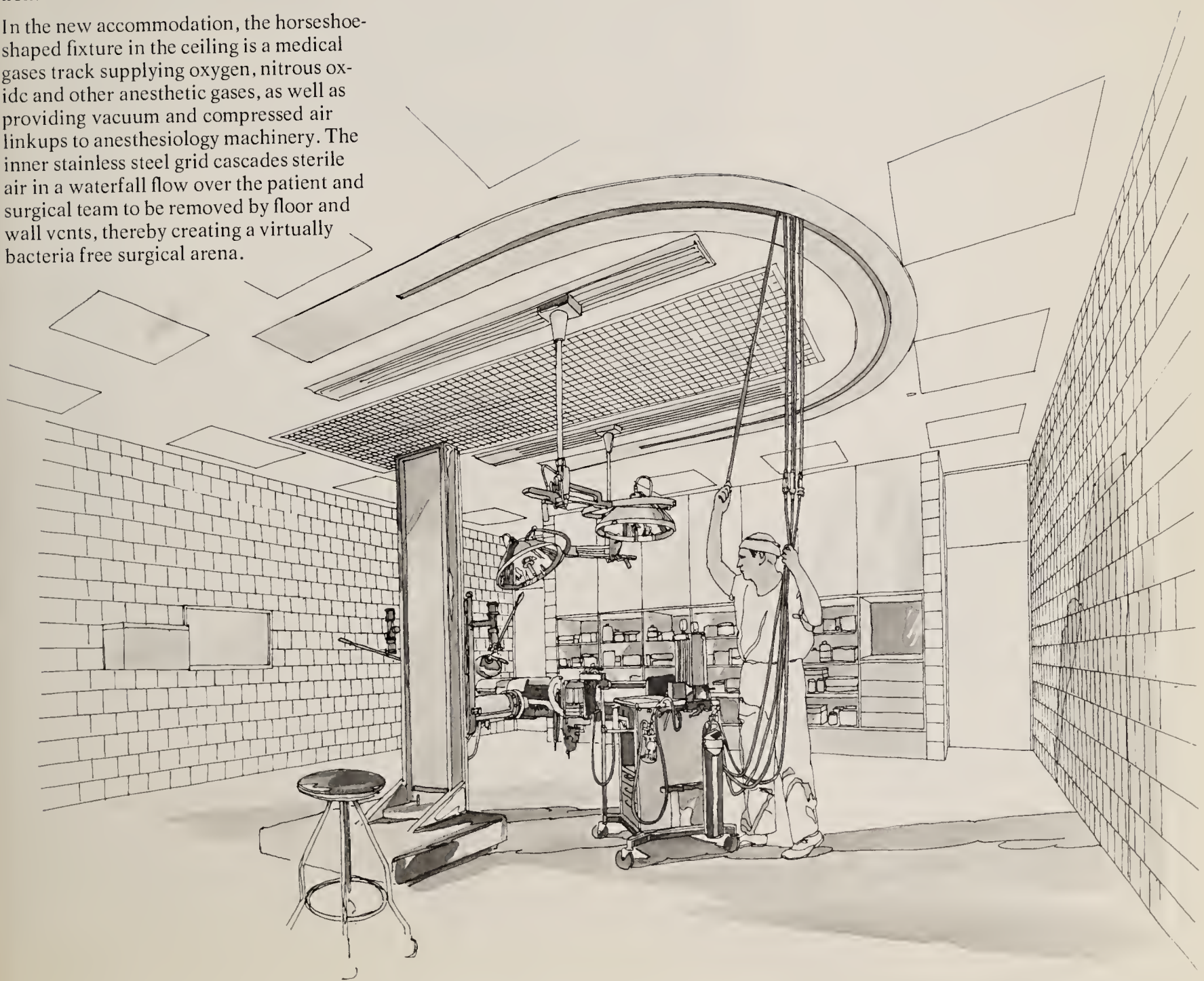


The familiar curved facade of the Infirmary's "front desk" . . . the reception center that serves not only as the first contact with the hospital for most patients . . . but also is the central communication station for inquiries and directions and the passing along of staff messages.

Front desk personnel shown here are: clerk receptionist Marcia Mahoney and Eugene Michaud, communication coordinator.

Artist's concept of the new "giant tear" surgical suite. The super-sized 20 by 24 foot operating room features a new version of the Infirmary's famed upside-down operating table which permits surgeons to use the natural force of gravity to help drift delicate retinal tissue back into position.

In the new accommodation, the horseshoe-shaped fixture in the ceiling is a medical gases track supplying oxygen, nitrous oxide and other anesthetic gases, as well as providing vacuum and compressed air linkups to anesthesiology machinery. The inner stainless steel grid cascades sterile air in a waterfall flow over the patient and surgical team to be removed by floor and wall vents, thereby creating a virtually bacteria free surgical arena.



Commanding a panoramic view of the river, the Infirmary's new dining room will be windowed for the entire length of the building along Charles Street. A handsome decor of rich browns and soft beiges is planned and accommodations that will double the seating capacity of the present.

For the first time, service is to emanate from islands of food, according to type, hot, cold, preprepared and cooked to order.

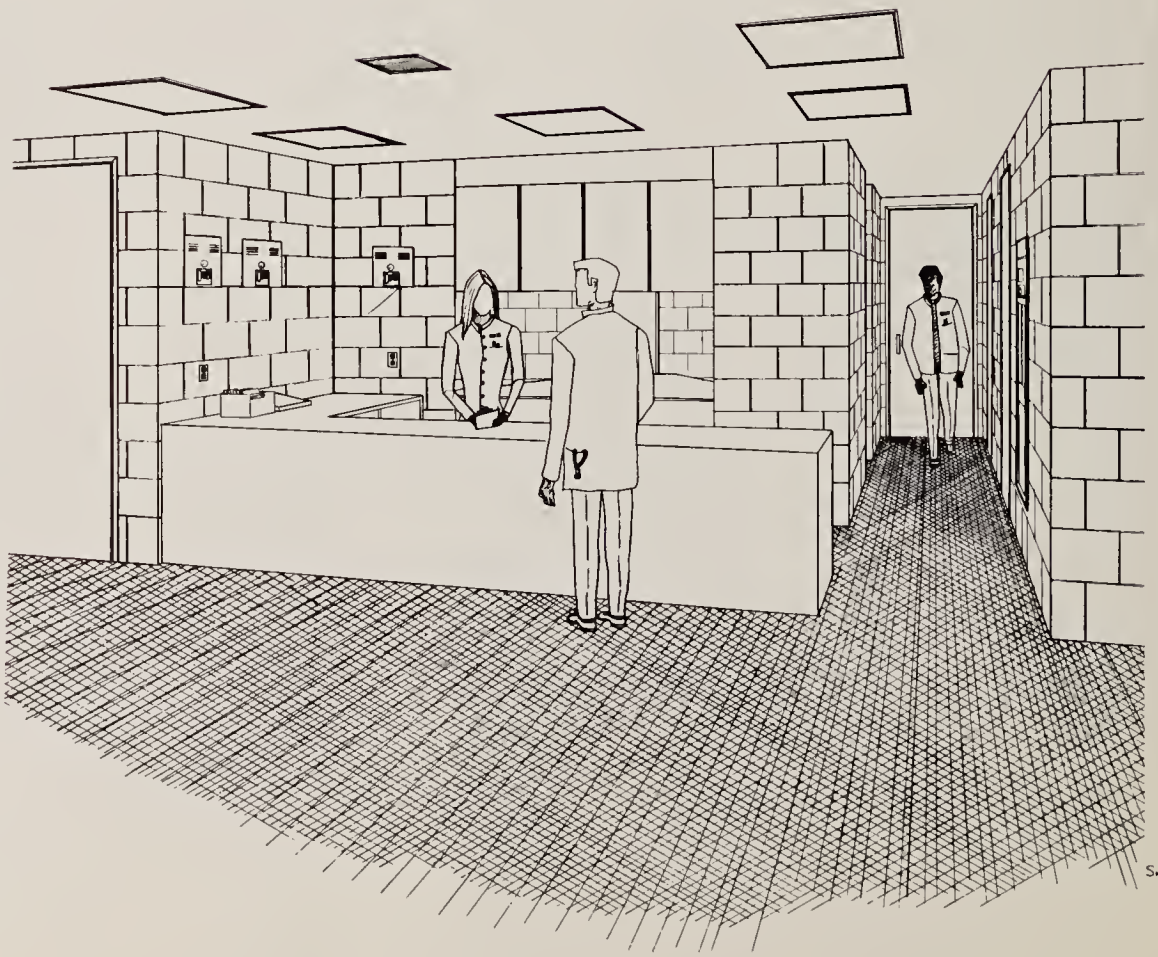
Unquestionably, the new dining room will offer the best view in Boston and food, service and style to match.

Central Nursing Station as seen from patients' rooms.

With all of the accoutrements usually associated with nursing stations neatly built in or enclosed in cabinets, the nursing station in the new building takes on a fresh and uncluttered look.

Speakers for a general sound system are recessed in the ceiling. Medical gases alarm systems for monitoring gas pressures are built into the wall to the left. Intercom patient-nurse calls relay through an electronic desk top console. The forefront is a secretarial area, while the background counter is set up as a charting area to provide greater privacy. Behind the wall is a small lounge, dressing room and bath for nursing station personnel.

Along the corridor to the right are (front to rear) pneumatic tube systems for transmission of messages, a private office for the head nurse, a nursing conference room and medical preparation room.



More than just a new idea, the patient room now being built in the new Infirmary incorporates so many advanced features it is a prototype of the form that hospital care itself will take. Flexibility is the hallmark because it converts — as does no other hospital room — to single or double occupancy with hardly a trace of the alternate use.

Moreover, the room exists not as an isolated unit but as a component of room clusters that grow into larger sectors, lending themselves readily to greater, lesser and different usage as demand indicates.

In this way maximum occupancy with its known payoff in savings to patients gains vast new potential. Such efficiency promises substantial dividends not only in patient comfort and staffing but in real operating cost control.

The patient room is the most visible symbol of the Infirmary's commitment to the future of its patients. Beyond adjusting to varied patient needs, individual tastes and cost-effective management, the room affords the fullest interplay of known medical techniques and those certain to come.

A new approach to structuring hospital rates — under a dual rate system — was proposed by Infirmary director Charles Wood at the 1971 mid-winter Forum of the Massachusetts Hospital Association.

Speaking as the Richard T. Viguers Memorial lecturer, Mr. Wood contended that the present system for determining inpatient costs is clumsy and outmoded and consequently burdens the wrong patients with unfair portions of the bill.

His concept, which has since attracted wide attention, is undergoing intense study and consideration. An explanatory monograph is available to anyone interested in the details.

Charles Wood, Infirmary director, as Mass. Hospital Association mid-winter forum lecturer.

In Memoriam

With great sadness the Infirmary suffered the loss of four trustees in 1971: Mrs. John W. Farley, Leslie Soule, Henry Hixon Meyer and Frank Christian.

Each served with affection and distinction. By virtue of the great expertise they brought to their stewardship of the Infirmary's affairs, they will long be sorely missed.

Henry Hixon Meyer led the Infirmary from the late 1930's when he first became a member of the Board of Managers, through the 40's and 50's as board president, and the 60's as its chairman.

Frank Christian served on the Board of Managers and as Chairman of the hospital's multi-million dollar fund drive for a new building.

Though their contribution will live long after them, their passing was tragic for, as the poets tell us, there falls no shadow only where there never shone the sun.

Henry Hixon Meyer

Frank S. Christian

The Ladies Visiting Committee did it again, setting the pace for benefit programs of the year with a grand coup . . . a premiere fashion show to mark the opening of Saks Fifth Avenue's new Boston store.

The preview . . .
High in the sky along the plankwork of the new building, models struck their angular poses in the couture creations of designer Mollie Parnis . . . to gain advance publicity for the show . . . proclaimed by the press "the gala fashion bash of the fall-winter season."

And the show . . .
Down the runway in the main ballroom at the Sheraton-Boston . . . while hundreds of Infirmary friends oohed and aahed . . . and when the show was over, the tally showed the building fund had benefited by more than $6,000.

An earlier LVC undertaking, an elegant June dinner-dance not only proved a lovely way to start the summer, but added another $5,500 to the LVC's coffers for the new Infirmary.

Photo by Ulrike Welch courtesy Herald Traveler

Photo by Dennis Brearley courtesy Record American

Photo by Ulrike Welch courtesy Herald Traveler

Photo by Dennis Brearley courtesy Record American

From a small x-ray service, begun in the carly 1920's the department has become a key diagnostic center now pcrforming morc than 17,000 radiological examinations of a special nature each year.

Here x-ray procedures have been pioneered and developed that are exclusive to this specialized practice of radiology.

Herc, answcrs often lie in millimeter diagnosis and so infinite care is required.

Teaching continucs to be a major interest, incorporated not only into the training of our Eye and ENT residcnts but also extended to residents in radiology from the Massachusetts General and Peter Bent Brigham Hospitals.

Dr. Alexander Macmillan, Jr. adjusts fluoroscopic x-ray equipment above radiology staff technician serving as model. Photo shows use of video tape and TV replay of the "view" being taken by the radiology equipment.

Hearing loss caused by excessive exposure to noise gained new national attention in a year in which ecology becamc a household word.

And so, thc topic drew wide attention when presented to medical writers at the Infirmary's annual Medical Writers Seminar. Dr. Daniel Miller, senior ENT surgeon, confirmed that noise has become a substantial industrial problem as well as a general health hazard. Factory workers still run a greater risk of permanent deafness from noise pollution than those exposed to loud rock-and-roll blasts, though warning their children of the consequences of amplified acid rock held more appeal for beleagured parents.

A BOSTON HERALD TRAVELER, WEDNESDAY, MARCH 17, 1971

Hearing Loss from Noise Pollution Seen Problem in Industry

By JOHN M. LANGONE

Hearing loss caused by exposure to noise has become a problem of considerable importance in industry — with legal as well as health-hazard implications.

"Industrial safety workmen's compensation claims add legal facets to problems of noise pollution," Dr. Daniel Miller, surgeon at Massachusetts Eye and Ear Infirmary, yesterday. The loss from stain to stain, but it is gradual

—difficulty communicating by speech while the individuals are in the noise itself — tinnitus (ringing in the ears) after working in the noise for several hours.

type and ear muffs) will reduce noise approximately 20 to 25 decibels and will protect the wearer from harmful sound in most industrial situations, Dr. Miller said

sachusetts allows compensation up to $10,000 for bilateral (both ears) ear involvement. The employe doesn't necessarily cease work for any period before filing a claim.

Warnings issued on loud noise

While industrial workers and rock audiences are both exposed to loud noise, the workers exposed in them rarely attain and for

...and the serious consequences of uncontrolled noise but perhaps medicine or surgery cannot help a

ing should be able to hear a single voice person at a distance of 20 feet with one ear tested if the noise

The Boston Globe Wednesday, March 17, 1971

Factory noise called worse than rock-roll

By Jean Dietz
Globe Staff

Industrial workers and spectators face far greater risk of permanent deafness from noise pollution than

Eye and Ear Infirmary surgeon warned yesterday

Dr. Daniel Miller, assistant clinical professor of otolaryngology at Harvard Medical School, urged employers to protect workers

compensation aims under state and Federal laws

"While much can be done to prevent the serious consequences of uncontrolled noise, medicine and surgery cannot help a

US panel warns of serious noise pollution

Associated Press

Boston Sunday Globe March 21, 1971

WASHINGTON—A government-sponsored panel said yesterday that noise pollution in the United States is "on the verge of reaching a serious level" and called for new Federal and state standards to protect Americans against hearing damage and annoyance.

The panel recommended 12 steps to help take away some of the din of modern living and said the United States should establish a national goal to work toward an environment in which Americans free of noise that jeopardizes their health and welfare or unnecessarily detracts from the quality of life.

"Millions of workers are now exposed to noise levels that have been shown conclusively to produce hearing damage," the panel said. Most of them are quite unaware of the hazard and do not act to protect themselves.

The panel said the Federal government should expand its role in developing standards for allowable exposure to industrial noise. It said states and local governments should adopt standards at least as stringent as Federal standards.

The Department of Health, Education and Welfare should establish criteria for use in setting standards to human exposure, it said.

The panel also said the Commerce Department should develop voluntary standards for placing noise ratings on consumer products that are significant sources of noise. In cases where the noise could produce hearing damage the labeling standards should be mandatory, it said.

The other recommendations called for expanded research into noise pollution, action by state governments to include the concept of noise zoning in planning for land use, and the establishment of a national noise abatement program within the Environmental Protection Agency, has been proposed to President Nixon in a bill now before the Senate.

To top it off . . . the traditional Christmas tree anchored firmly to the last massive steel beam to be set in place atop the new building.

Even the early July day joined in the celebration, flooding the ornamental tree and silvered hard hats of the guests and speakers with brilliant sunlight.

On hand for the big moment were members of the Infirmary's board of managers, former director Francis Hill and two long-time members of the medical staff, Drs. Leroy Schall and Harry Braconier, who'd been in on the planning of a new Infirmary back 16 years ago when the present dimensions of the new building were scarcely envisioned.

On the signal, the hoist and guide wires attached to a huge crane went taut . . . the huge metal hitches took hold, and slowly and gracefully the great beam rose . . . taking the trip beautifully.

As TV and press photographers clicked away, the sight of the Christmas tree going aloft drew cheers from the spectators, passersby, construction crews and Infirmary employes alike. That evening filmstrips of the event were carried on Channel 7 and photos and stories appeared in the Herald Traveler and Record American.

Lettered on the beam was a message for all the Infirmary's friends and neighbors to see: Give Now to Build a New Mass. Eye and Ear Infirmary. Supporting both the beam and the slogan — (left to right) William H. Claflin, president, hospital corporation, Walk Jones, head of architectural firm of Walk Jones and Francis Mah, Inc., Charles Wood, Infirmary director, and Robert Robertson, project manager, Vappi and Co.

The Infirmary's foremost sidewalk superintendent for the new building, associate director Ray Lyons previews the view-to-be from the Surgeons and Nurses Lounge along the seventh floor's northeast side. The spectacular overview sweeps along the lower basin of the Charles, the Lechmere bridge and circle and on out toward the Inner Harbor.

The new building's steel frame rises from pressure-injected pre-augured footings, whose use reduced to a minimum the noise and vibration customarily involved in foundation work.

The exterior of the building will be precast concrete with vertically posted aluminum sash and glass.

The building itself has many unusual features including a six-story deep open-space well in the center. This "inner core" of natural light will give all patients' rooms on the inside perimeter a view of the landscaped garden terrace to be created at its base, eight stories above ground level. Outer rooms, each having a window-wall of thermopaned "solar ray" glass will overlook the Charles River, Beacon Hill and the Government Center.

A new entrance on Fruit Street will include an ambulance ramp, and all ambulatory services will be relocated for patients' convenience on the first and second floors.

Educational facilities, including an amphitheatre seating 300 persons, a 30,000 volume library and the Vision Information Center are blueprinted for the third floor.

The fourth and fifth stories will primarily accommodate research laboratories and will house overnight quarters for the resident staff and those physicians assigned for 24-hour emergency service. On these floors, the Infirmary's Eaton-Peabody Laboratory of Auditory Physiology and the Howe Laboratory of Ophthalmology . . . each a laboratory famed in its respective field . . . will gain extensive new space in sound-proof and/or contamination-free chambers fitted with elite equipment appropriate to the work.

A wholly new and self-inclusive hospital in the conventional sense will be created in the portion of the building to be built from the sixth floor up.

The sixth floor will become a surgical center, replete with 20 ultra-modern operating rooms and adjacent recovery rooms.

Radiology, clinical laboratories and a central supply center will occupy the seventh floor.

At the eight-story level, the Infirmary will incorporate its dietary services, kitchens, and a new restaurant that will open into the inner garden terrace permitting outdoor dining in good weather.

The next five floors will be used exclusively for inpatients, each room designed for either single or double occupancy to assure maximum flexibility.

The architects, nationally renowned for their work in hospital design, developed the plans for the new Infirmary over a two-year period.

Internally, each department's size, shape and fixed equipment evolved from an interchange of ideas between the Infirmary's medical and administrative staff and the architects. This approach produced the most efficient, effective and esthetically harmonious arrangements possible.

As a result, the Infirmary will be able to institute new concepts for examining and treating patients; for educating students and staff; and for conducting short- and long-term research.

New aids to administrative services and for patient support activities also have been designed in: closed circuit TV, computer programs, intercommunication systems and electronically controlled nurses stations — are but a few.

Most important, however, is the striking quality of the atmosphere of the new building, one that combines the foremost in medical proficiency with pleasant surroundings and quietude. Floors are to be carpeted; walls to be warm-colored and bright; interior decor to be inviting and non-institutional.

Waiting at the door for the Infirmary's special brand of medical services . . . the symbol of all who need them.

Trustees

(dates indicate year of appointment)

1925 Hon. Leverett Saltonstall
1929 Walter H. Trumbull
1934 Robert F. Bradford
1935 William A. Parker
1937 Henry Hixon Meyer[1]
1940 Mrs. Richard Cary Curtis
1940 Horace W. Frost
1942 Hon. Edmund V. Keville
1943 Frederick Winthrop — honorary 1971
1945 Mrs. Sullivan A. Sargent
1947 William H. Claflin, III
1948 Mrs. John W. Farley[2]
1948 The Rev. Robert G. Metters
1948 August R. Meyer
1948 Miss Amelia Peabody
1949 Nathaniel Faxon, M.D.
1951 Francis W. Hatch, Jr.
1951 George L. Pew
1951 Howland S. Warren
1951 Melville Chapin
1951 Henry K. Porter
1952 George A. McLaughlin
1953 Mrs. Varaztad H. Kazanjian
1955 Richard P. Chapman
1955 William Ehrlich
1955 Weston Howland, Jr.
1957 William L. Saltonstall
1957 Leslie Soule[3]
1963 Thomas B. Frost
1963 John S. Howe
1963 Frederick H. Lovejoy
1963 Thomas Allsop
1965 Frank S. Christian[4]
1965 George M. Lovejoy, Jr.
1965 Mrs. John Lowell
1965 Frederick C. Rozelle, Jr.
1966 Francis S. Hill
1966 Robert Bacon
1966 James I. Summers
1966 Leo F. Daley
1967 Paul A. Chandler, M.D.
1967 Edwin B. Dunphy, M.D.
1967 Mrs. Bartlett Harwood
1967 Henry G. Lapham
1967 John M. Lord
1967 LeRoy A. Schall, M.D.
1967 William F. Spang
1967 John I. Taylor[5]
1967 Monte J. Wallace
1968 Colin McA. Cunningham
1968 W. Clement Stone — honorary
1969 Richard W. Young, Ph.D.
1970 Ephron Catlin
1970 Mrs. Frederick S. Moseley
1970 Mrs. Frederick R. H. Witherby
1971 Mrs. Thaddeus R. Beal
1971 Avram J. Goldberg
1971 Frank L. Harrington, Jr.
1971 Robert C. Jordan
1971 Mrs. Robert C. Meisel
1971 Arthur F. F. Snyder
1971 Robert D. Williams

[1]deceased April 22, 1971
[2]deceased January 18, 1972
[3]deceased July 18, 1971
[4]deceased January 12, 1971
[5]resigned February 10, 1971

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Horace W. Frost, *Treasurer*
George M. Lovejoy, Jr., *Secretary*
Ephron Catlin
Mrs. Richard Cary Curtis
George A. McLaughlin
*Ephraim Friedman, M.D.
August R. Meyer
William A. Parker
Henry K. Porter
James I. Summers
Walter H. Trumbull

(all appointments designated through December 31, 1971)
*Appointed by the Commonwealth

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Associate Director
Raymond W. Lyons
Assistant Director
James R. Hamill
Assistant Director
Samuel S. Drury
Controller
Robert P. Dulude
Director of Personnel
William F. Hayward
Director of Public Relations
Loretta McLaughlin
Director of Nursing Services
Barbara Czechowski, R.N.
Director of Social Services
Madeline Shipsey
Chief Admitting Officer
Ruth Dorfman, R.N.
Building Services Director
F. Malcolm Watts
Dietary Services Director
Herbert Kirshnit
Maintenance Services Director
Robert Marshall
Purchasing and Stores Director
Lehan Power
Administrative Assistant, Nursing Services
Ruth Stratiff
Administrative Supervisor, Ambulatory Services
Edward J. Stockman, Jr.
Chief Audiologist
Rhoda Kimmel Morrison
Chief Clinics Admitting Officer
Helen Cantwell
Chief Scheduling Officer
Rose Rich
Coordinator of Nursing Education
Irene Cullin, R.N.
Data Processing Manager
Paul Peloquin
Librarian and Archivist
Charles Synder
Optical Shop Manager
Vincent H. Farley
Patients Accounts Director
Gerald Clinton
Volunteer Director
Rosanne Ring

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Mrs. Taylor R. Smith
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Mrs. Frederick R. H. Witherby
Mrs. Stewart C. Woodworth

*Mrs. Harold Peabody
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Mrs. Sidney C. Wiggin
Mrs. George Wyshak

*Past Chairman, LVC

Statistical Highlights

In-Patient Hospital (178 Beds)

Admissions:	1970	1971
Eye Patients	6,188	6,114
E.N.T. Patients	4,973	4,866
Total Admissions	11,161	10,980
Operations:		
By Eye House Staff	1,526	1,217
By Eye Attending Staff	5,031	5,084
Total Eye Operations	6,557	6,301
By E.N.T. House Staff	1,259	1,573
By E.N.T. Attending Staff	3,257	2,825
Total E.N.T. Operations	4,516	4,398
Total Operations	11,073	10,699
Discharges:	11,157	10,978
Death	14	9
Autopsies	57%	44%
Patient Days	57,141	55,507
Average Patient Census	157	153
Average Length of Stay	5.12 days	5.06 days
Bed Utilization	88%	87%
Average Patient Cost Per Day	$84.64	$98.93

Out-Patient Department

	1970	1971
EYE CLINIC		
Total Eye Visits	58,839	62,723
E.N.T. CLINIC		
Total E.N.T. Visits	23,399	23,921
Total O.P.D. Visits	82,238	86,644

Emergency Ward

Eye Cases	15,508	15,641
E.N.T. Cases	10,843	10,942
Total	26,351	26,583

Minor Surgery

Eye Cases	1,675	1,683
E.N.T. Cases	1,352	1,162
Total	3,027	2,845

Balance Sheet
September 30, 1971

Assets		
Cash		$ 1,117,090
Investments — at cost		
Cash in savings bank accounts	$ 110,000	
Marketable securities (quoted market value $12,921,726)	7,795,701	7,905,701
Accounts receivable	1,976,273	
Less allowance for doubtful receivables	166,659	1,809,614
Inventories — at lower cost (first-in, first-out method) or market		66,674
Prepaid expenses		21,196
Unamortized pension costs		58,218
Plant and equipment — at cost		
Buildings	3,728,294	
Furniture, fixtures and equipment	867,436	
	4,595,730	
Less accumulated depreciation	2,319,054	
	2,276,676	
Land	4,701	2,281,377
Construction in progress		9,167,559
		$22,427,429
Liabilities and Fund Balances		
Note Payable — Bank-unsecured		$700,000
Advances from patients		11,516
Accounts payable		245,765
Payroll taxes and other withholdings payable		50,112
Accrued payroll, payroll taxes and other expenses		77,173
Reserves for contractual adjustments and other contingencies (Note A)		49,263
Fund balances		
Temporary funds	744,584	
Special funds	3,228	
Special purpose funds	665,344	
	1,413,156	
Unexpended restricted income of permanent funds	463,510	
General Fund	922,326	
General Pension Reserve (Note B)	1,783,739	
Permanent funds — income restricted	1,621,145	
Permanent funds — income unrestricted	2,852,590	
Undistributed security gains on pooled investments	47,648	
Funds invested in plant	2,281,377	
Plant Depreciation Fund	740,550	
Building Fund	9,167,559	21,293,600
		$22,427,429

Summary of Investment Income
September 30, 1971

Total	$ 491,264
Transferred to General Fund	289,575
Applied to Offset Operating Loss	$ 201,689

Condensed Income Account
September 30, 1971

Gross Charges for Services to Patients		$7,884,818
Adjustments to Gross Charges:		
Allowances to patients	$150,842	
Allowances to contracting agencies	122,989	
Allowances to Blue Cross	9,308	
Provision for uncollectible accounts	187,216	470,355
Net Revenue from Services to patients		$7,374,463
Other Operating Revenue		305,484
Total Operating Revenue		$7,679,947
Hospital Operating Expenses (including provision for depreciation)		$7,925,971
Hospital Operating Loss		$ 246,024
Donated Income		
United Community Services	$ 17,796	
Estates of Elisha V. Ashton, G. Gorham Peters, Samuel C. Howes, and others	26,539	44,335
Hospital Net Loss		$ 201,689

Report of the Auditor

Board of Managers
Massachusetts Eye and Ear Infirmary

We have examined the balance sheet of MASSACHUSETTS EYE AND EAR INFIRMARY (a Massachusetts corporation, not for profit) as of September 30, 1971, and the related statements of income and changes in fund balances for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related statements of income and changes in fund balances present fairly the financial position of Massachusetts Eye and Ear Infirmary at September 30, 1971, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Alexander Grant & Company

Boston, Massachusetts

Notes

Note A — Reserves for Contractual Adjustments and Other Contingencies

The Infirmary renders patient care services under contracts with third party agencies at provisional rates which are subject to adjustment after audit. It also engages in research activities under contracts with U. S. Government agencies, the reimbursed costs of which are subject to post-performance review and adjustment. The accompanying financial statements include provisions for estimated adjustments which may be required under the aforementioned contracts.

Note B — Pension Plan

Under the terms of a pension plan adopted September 5, 1955, as amended effective October 1, 1966, the Infirmary established a General Pension Reserve for the purpose of funding the liability for pension payments to eligible employees upon retirement.

The total pension expense for the year was approximately $179,000, which included amortization of past service cost over 20 years. The assets of the funded pension reserve exceeded the actuarially computed value of vested benefits for the plan as of September 30, 1970, the latest valuation date.

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James R. Hamill
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Herbert Kirshnit
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Charles Snyder
Delphus Kaczowski
John Webb

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Abraham Pollen, M.D.
Charles L. Schepens, M.D.
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Karl Riemer, M.D.

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Assistant Surgeons in Ophthalmology
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S. Arthur Boruchoff, M.D.
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Claes H. Dohlman, M.D.
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Robert C. Lawlor, M.D.
J. Wallace McMeel, M.D.
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B. Thomas Hutchinson, M.D.

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George E. Garcia, M.D.
Alexander R. Gaudio, M.D.
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Joseph C. Kim, M.D.
Robert S. L. Kinder, M.D.
Mohandas M. Kini, M.D.
Joel A. Kraut, M.D.
Arnold J. Kroll, M.D.
Brent W. Lambert, M.D.**
Deborah P. Langston, M.D.
Ernst J. Meyer, M.D.
Joseph Michon, Jr., M.D.**
David Miller, M.D.
Robert A. Petersen, M.D.
Silvio R. Pirquet, M.D.
Ronald C. Pruett, M.D.
Richard M. Robb, M.D.
Perry Rosenthal, M.D.
John G. Sebestyen, M.D.
Richard A. P. Thoft, M.D.
David S. Walton, M.D.
Donald R. Weis, M.D.
Shirley H. Wray, M.D.*

*Neuro-ophthalmology
**Military Leave of Absence

Consulting Chiefs of Ophthalmology
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Paul A. Chandler, M.D.
David G. Cogan, M.D.

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Virgil G. Casten, M.D.
Brendan D. Leahey, M.D.
Mahlon T. Easton, M.D.
Albert E. Sloane, M.D.
Francis J. West, M.D.
Joseph M. Clough, M.D.
Garrett L. Sullivan, M.D.
Harry E. Braconier, M.D.

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Bertha Offenbach, M.D.
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Corneal Contact Lens Service
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Scleral Contact Lens Service
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Toichiro Kuwabara, M.D., *Asst.*

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Harvey H. Slansky, M.D.

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Surgeons in Otolaryngology
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Associate Surgeons in Otolaryngology
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Alfred D. Weiss, M.D.[2]

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Walter J. E. Carroll, M.D.
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J. Charles Drooker, M.D.

Senior Consulting Surgeon for Plastic Operations
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Charles Kent, M.D.
Assistant Surgeon in Otolaryngology
Elizabeth DeBlois, M.D.

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Morris Swartz, M.D.

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Subdivision of Otoneurology
Alfred D. Weiss, M.D., *Director*[2]

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Tumor Clinic
Daniel Miller, M.D., *Director*

Subdivision of Otolaryngologic Pathology
Max L. Goodman, M.D., *Director*

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Alfred D. Weiss, M.D.[2]

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Burton F. Jaffe, M.D.

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Mrs. Paul A. Doehler

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[1] Plastic Operations
[2] Neurology

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Anita Mangiaracine

Consultant in Internal Medicine
Richard A. Field, M.D.

The members of the medical staff of the Massachusetts General Hospital are consultants to the Infirmary, and in this capacity become a part of the staff of the Massachusetts Eye and Ear Infirmary.

*Leave of absence

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Electron Microscopy Laboratory
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John Wright, M.D.
Bjorn Etholm, M.D.

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Department of Ophthalmology

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Mrs. William A. Slade, Jr.

*Deceased

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Henry F. Allen, M.D.

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W. Morton Grant, M.D.

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Jin H. Kinoshita, Ph.D.

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Toichiro Kuwabara, M.D.

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Donald R. Weis, M.D.
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Michael Wiedman, M.D.

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Sumner D. Liebman, M.D.

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Joel A. Kraut, M.D.
Ronald C. Pruett, M.D.
Harvey H. Slansky, M.D.

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Jaines R. Lee, M.D.
James P. McCulley, M.D.
Miehael F. Marmor, M.D.
William R. Sullivan, M.D.
Osear Wand, M.D.

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Bernard J. Hodgkinson, M.D.
Abraham Pollen, M.D.

Harvard Medical School Faculty
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Harold F. Schuknecht, M.D.

Professor of Otolaryngology
William W. Montgomery, M.D.

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Assistant Professor of Audiology
Allan C. Goodman, Ph.D.

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Marshall Strome, M.D.

Assistant Professor of Neurology
Alfred D. Weiss, M.D.

Assistant Clinical Professor of Otolaryngology
Daniel Miller, M.D.

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Yale J. Berry, M.D.
Robert W. Clubb, M.D.
Charles W. Cummings, M.D.
Allan G. Edwards, Jr., M.D.
Charles Ferguson, M.D.
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Alfred L. Hurst, M.D.
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Thomas Klein, M.D.
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John E. McKeigue, M.D.
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Aram Roopenian, M.D.
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